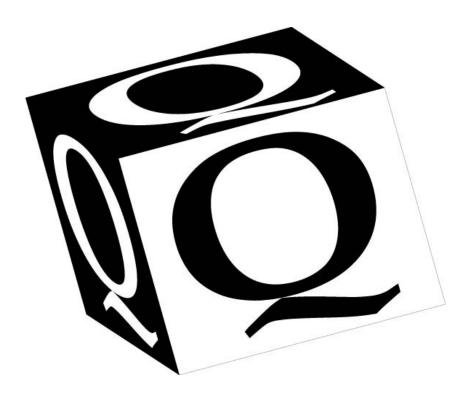
ARIZONA ADULT EDUCATION



STANDARDS

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Lisa Graham Keegan Superintendent of Public Instruction

July 1, 2000

Dear Arizona Adult Educator:

Ensuring that all learners have access to extraordinary education is a commitment that the Arizona Department of Education takes very seriously. It isn't just a catchphrase. It is a philosophy that drives all we do.

As such, we do not differentiate between the rich and the poor, between urban and rural; or between children and adults. And this is very important -- we believe that, whether eight or eighty years old, all learners are entitled to excellence.

The Arizona Adult Education Standards Initiative affirms our commitment to excellence. This critical project, now in its third year, brings together many of the most thoughtful educators in our state to create high standards for adult learners. As I review the content and performance standards and sample activities contained in this document, I am confident that all adult learners will receive an educational experience that is consistent, regardless of program type, and one that reflects the highest quality in curriculum and instruction.

In Arizona we have made significant progress over the past several years to implement high standards for students enrolled in traditional educational programs. I am very pleased that we are demanding high standards from learners enrolled in non-traditional and adult education programs as well. The content and performance standards delineated herein provide the cornerstone by which we will build quality teaching and learning. Most importantly, they afford adult learners the support they need to achieve their goals in terms of work, family and community and ultimately, to build quality lives.

Sincerely,

Lisa Graham Keegan Superintendent of Public Instruction



Lisa Graham Keegan Superintendent of Public Instruction

July 1, 2000

Dear Arizona Adult Educator:

It is with much enthusiasm and appreciation that I write this introduction to the second edition of the Arizona Adult Education Standards.

The Arizona Adult Education Standards Initiative represents one of the most important professional endeavors designed and implemented by Arizona's adult education community to ensure consistency in program content and learner outcomes throughout the state. The fundamental purpose of this work, now in its third year, is to ensure the highest levels of achievement for all adult learners through nothing less than extraordinary education!

In recent years, our state legislature and the United States Congress have demanded that we provide evidence that learners enrolled in adult education programs do, in fact, achieve high levels of educational performance. The Arizona Adult Education Standards Initiative **preceded** legislative mandates to report individual learner outcomes. At least six months before passage of the Work Force Investment Act, the Arizona adult education community came together to develop the components of a comprehensive, statewide student performance accountability system. The collaborative efforts of adult educators and the Arizona Department of Education over the past two-and-one half years have resulted in this publication of content standards and performance standards for:

- Reading
- Writing
- Mathematics
- Science
- Social Studies
- ESOL
- Citizenship Test Preparation

In addition, we are in the final stages of developing a valid and reliable system of measuring educational gains as well as an electronic data collection and reporting system that reports individual student gains.

Commitment to appropriate and timely professional development and technical assistance has been a critical component throughout the process to support adult educators in the creation and initial implementation of the Arizona Adult Education Standards Initiative. This commitment will continue during the next several years as we pursue our mission to "provide the framework for adult learners to maximize their potential in the community, family, and workplace."

As you implement the content and performance standards contained in this document, please take note of what seems to work well and those areas you feel need further development. This Standards document is dynamic and "living", open to continuous improvement and refinement. We expect to revise this Standards document periodically. Let us know what you think as you work with this important and valuable tool.

Finally, I want to express my sincere appreciation to the many outstanding adult educators who contributed their expertise, experience, and energy to this remarkable initiative. I am deeply grateful for their significant contributions to the profession and in awe of the example their work sets to ensure that Arizona's adult learners receive *extraordinary education*.

Sincerely,

Karen Liersch State Director of Adult Education

OVERVIEW

ARIZONA ADULT EDUCATION STANDARDS INITIATIVE

The Arizona Adult Education Standards Initiative (Standards Initiative) represents a proactive effort by Arizona's adult education community to ensure consistency in program content and student outcomes for adult learners throughout the state. The Initiative is sponsored by the Arizona Department of Education – Division of Adult Education and developed by an outstanding cadre of the state's adult educators.

The fundamental goal of this multi-year project is to ensure high levels of achievement for all adult learners in Arizona. As such, there are several critical reasons why it is so important to the future of adult education in Arizona as well as in the nation.

Value to the Adult Learner

The Standards Initiative provides consistent content and performance standards for implementation in all programs funded by the Arizona Department of Education.

Value to Programs and Instructional Practices

The Standards Initiative improves articulation and allows adult educators to assess student performance and measure program effectiveness with greater accuracy. In addition, exemplars of curriculum alignment developed by adult educators during the spring and summer of 2000 also provide outstanding examples of curricula in each of the content areas based on the standards.

Value to the State of Arizona

The Standards Initiative establishes a strong foundation for effective delivery of services to all adult learners. Moreover, the Initiative offers benchmarks for learning and program performance and sets forth high expectations for quality and accountability.

Value to the Profession of Adult Education

The Standards Initiative raises the bar on instructional performance and accountability which, in turn, increases the credibility of adult education within the field of teaching and learning. In addition, the Arizona Adult Education Standards complement similar efforts on the national level (i.e., *Equipped for the Future* published by the National Institute for Literacy) by providing the framework for adult learners to maximize their potential in the community, family, and workplace.

HOW THE ADULT EDUCATION STANDARDS WERE DEVELOPED

The process used to develop the adult education content and performance standards was designed by the Arizona Department of Education (Division of Adult Education) with the assistance of two consulting firms: Leadership Learning Systems, Inc. (based in Arizona and Illinois) and StandardsWork (Washington, D.C.).

In order to create a clear focus and ensure leadership of the Initiative from professionals the field, an open invitation was extended to adult educators statewide requesting participation in the Standards Initiative. The initial team convened in January 1998, to inaugurate the Initiative. As a result of their thoughtful dialogue and discussion, the following critical statements were created to direct the work of the Standards Initiative.

Beliefs

We believe adult learners are

- multi-faceted, unique individuals
- capable of learning
- motivated by diverse life experiences
- exploring ways to improve their lives through relevant educational opportunities.

We believe adult education is a learner-centered, interactive process which

- values and supports the individual in defining and achieving personal goals
- develops and improves basic and life skills in the community, family, and workplace.

Vision

Adult education standards are the cornerstone for quality teaching, quality learning, and quality lives.

Mission

The Arizona Adult Education Standards Initiative provides the framework for Adult learners to maximize their potential in the community, family, and workplace. The project provides consistency and continuity of educational services throughout the state as well as an easily understood model which communicates the contributions of adult education

The approach used to create the Arizona Adult Education content and performance standards combined both process and substance. The process was highly participatory and encompassed active involvement and input of more than 200 adult educators across the state during the period of February 1998 – June 2000. The substance focused on the articulation and continuous improvement of rigorous and realistic standards for adult learning in specific subject areas including reading, writing, mathematics, science, social studies, ESOL, and citizenship test preparation.

THE STANDARDS INITIATIVE TIMELINE

A Steering Committee of adult educators provided overall guidance and direction throughout this period. Facilitation of the process was provided by Gail A. Digate of Leadership Learning Systems, Inc. and consultation in developing content and performance standards was provided by Susan Pimentel of Standards Work.

A brief description of each phase of the Arizona Adult Education Standards Initiative appears below:

Phase I: January – December 1998

Teams of adult educators met to draft content standards in reading, writing, mathematics, ESOL, and Citizenship Test Preparation. These teams consulted a variety of resources, including the Arizona K-12 Academic Standards. A description of the relationship of the adult education content standards and the K-12 academic standards is provided on page 7. Several external, expert reviewers provided feedback and comments for continuous improvement to the original drafts.

Phase II: January – June 1999

During the second year of the Initiative, expanded teams of adult educators met to:

- conduct focus groups with adult educators and adult learners to solicit comments and suggestions on the drafts of the content standards. Focus group sessions were held in Flagstaff, Phoenix, Tucson and Yuma.
- A second external review was conducted by Susan Pimentel of StandardsWork in August 1998.
- Following adoption of the content standards by the Steering Committee, initial work began on the development of performance standards in reading, writing, mathematics, ESOL and Citizenship Test preparation in September.
- Two additional teams were established to plan future implementation efforts: Professional Development and Marketing/Communications.

Phase III: July 1999 – June 2000

During the third year of the Initiative, the focus of work included:

- Initial release of the content standards in reading, writing, mathematics, ESOL, and Citizenship Test preparation at the 1999 Arizona Adult Education Conference (September 29 October 2)
- Regional focus groups to solicit input on performance standards. These sessions were held in Flagstaff, Holbrook, Phoenix, Tucson, and Yuma.

- Revision of both content and performance standards to reflect the federal requirements of an additional level in ABE, the division of Adult Secondary Education (ASE formerly GED preparation) into two levels, and adding two additional ESOL levels.
- Creation of content standards in science and social studies
- Regional focus groups to solicit and gather input on drafts of content standards in science and social studies
- Establishment of a work team to develop recommendations regarding appropriate assessment strategies in alignment with the content standards and federal requirements to document educational gain (Note: Recommendations will be submitted to the Arizona Department of Education Division of Adult Education) in the autumn, 2000).
- Creation and training of a cadre of adult educators to support implementation of the Arizona Adult Education Standards Initiative (i.e., Standards Specialists)
- Creation of curriculum alignment exemplars in reading, writing, mathematics, and ESOL by teams of adult educators from programs across the state (i.e., Curriculum Aligners)
- Implementation of a four-day summer institute which brought together more than 100 adult educators (i.e., Standards Specialists and Curriculum Aligners) to complete development of curriculum alignment exemplars and begin articulation of strategies and action plans designed to support implementation of the Standards Initiative in adult education programs throughout the state.

It was during this institute that the State Director of Adult Education remarked that what began as a curriculum frameworks "project" indeed had become a major "initiative" destined to transform adult education in the state of Arizona and ensure "extraordinary" education to every adult learner.

Phase IV: July 2000 – September 2001

The following activities are anticipated for implementation in the next phase of the Standards Initiative:

- Pilot project to implement and "test" assessment strategies
- Consultation and support to adult education programs by Standards Specialists to implement content and performance standards in reading, writing, mathematics, ESOL, and citizenship test preparation

- Development of performance standards in science and social studies (including input and feedback from the field via the Arizona Department of Education (Division of Adult Education) website
- Focus groups with representatives of community colleges regarding implications of the Arizona Adult Education Standards Initiative for adult learners' matriculation to community college programs
- Evaluation of the Standards Initiative (1998 2001)

Phase V: July 2001 – June 2004

• Complete implementation of content and performance standards in reading, writing, mathematics, science, social studies, ESOL, and citizenship test preparation

(Note: Implementation of science and social studies content and performance standards is required of adult education providers by July 1, 2002.)

• Complete implementation of assessment strategies

(Note: Implementation of assessment strategies is required of adult education providers by July 1, 2002.)

• Periodic review and revision of content and performance standards as needed (e.g. commitment to continuous improvement)

THE IMPORTANCE OF SCIENCE, SOCIAL STUDIES AND TECHNOLOGY

The first edition of the Arizona Adult Education Standards was released in September, 1999, and contained content standards in Reading, Writing, Mathematics, ESOL and Citizenship Test Preparation. This (second) edition provides updated content and performance standards in these disciplines along with content standards in Science and Social Studies.

The purpose of including content standards in Science and Social Studies is to ensure that students who *so choose* would have access to instruction in these disciplines. As adult literacy education in Arizona is not compulsory, adult learners *choose* to take the courses that enable them to reach educational goals that further their ability to function in the family, the community and the workplace. Making available to adult learners a solid foundation in the physical, natural and social sciences enables them to invest in their own personal and professional development.

As technological advances propel rapid changes in how people live and work, all adult learners will need to develop and refine skills that keep them competitive and productive in the workplace. Now and into the future, access to, and basic computer and Internet skills, will enable adult learners to function successfully in the family, the community and the workplace. During FY2000, the ADE provided resources and training to make all ADE-funded programs Internet-connected: for administration, instruction and professional development. During the next three years, the ADE will continue to provide resources and training to enable adult education and family literacy teachers to become computer literate and Internet savvy. By the end of FY2004, it is expected that Arizona's Adult Education Standards will be revised to reflect a much greater expertise with technology on the part of adult educators, and a much higher expectation of adult learners with regard to basic computer and Internet skills.

RELATIONSHIP OF THE ARIZONA ADULT EDUCATION CONTENT STANDARDS TO ARIZONA K-12 ACADEMIC STANDARDS

The initial charge from the State Director of Adult Education in January 1998 to develop content standards in adult education carried with it the need to craft world-class standards (not minimal competencies) and to customize these standards for adult learners. That said, content standards contained herein reflect sensible criteria for usefulness, intelligibility, rigor and measurability. In addition, content standards focus on academics, contain the right mix of skills and content, and represent a reasonable pattern of cumulative learning that is manageable (given the constraints of time).

A critical element in the process of developing content standards in adult education involved benchmarking the drafts of content standards to world-class levels and then reviewing them for relevancy, intelligibility and measurability.

As Arizona's academic standards for students in grades K-12 are considered to be among the best in the nation, adult educators used this document as a valuable resource in both crafting and reviewing the adult education standards. Comparing what students in K-12 are capable of accomplishing with expectations for adult learners helped to aim higher when judging the potential of adult learners.

In summary, the focus in consulting the Arizona K-12 Academic Standards was to align the documents (i.e., content standards in Adult Education and K-12) in terms of rigor and comprehensiveness. However, no attempt was made to gain a direct one-to-one correspondence between the two documents as the two systems of education clearly serve different populations with specific needs, and facing diverse challenges and opportunities.

HOW TO READ CONTENT AND PERFORMANCE STANDARDS

If you are confused about the language of standards, you are not alone. This section provides definitions for standards-related terms and an analogy (using a non-academic example) to illustrate several important concepts. The analogy appears in *italics*.

Goal

A goal is the end result of a learning experience. A goal often is not measurable in an immediate sense. It reflects a state of *being* rather than a state of *action*. A goal expresses a *purpose* for instruction but does not designate the specific abilities that the learner must possess.

To improve running skills

Content Standard

A content standard *supports* the goal. It defines what a learner must *know* and *be able to do*. A content standard (also referred to as an exit standard) is brief, crisp, and written to the point. It uses jargon-free English so instructors and adult learners can understand it easily.

The learner is able to run one mile.

Indicators and Sub-Indicators

Indicators and sub-indicators contain all the knowledge and skills a learner needs to master the more broadly stated content standard. In essence, indicators and sub-indicators detail the content standard. Educators may refer to indicators and sub-indicators as "further domain specifications" or "benchmarks" that describe the skills, habits, and understandings that the learner must master.

Indicator: The learner understands the physiology of the body and knows how

to run safely.

Sub-indicators: • *Understands physiology of muscles, bones, and Cardiovascular system*

• Understands how to warm up and cool down safely

• Understands how to pace self and breathe correctly while running

• Uses correct foot position when running (i.e., heel-toe-heel running)

• Observes the rules of the road (e.g., face traffic, observe signs, run on sidewalk or shoulder of the road)

Sample Activities

Sample activities are designed to illustrate the indicators and sub-indicators. They are not required; rather, sample activities are provided to offer instructors some useful ideas, suggestions, and possible ways to bring the standards and indicators to life. In addition, sample activities reflect several core competencies (including communication skills, interpersonal skills, and critical thinking skills) which can be demonstrated within several contexts or settings (including the community, family, and workplace). Sample activities are included in this document as resources for instruction. Sample activities in science and social studies have been cross-referenced to content standards in reading, writing, and mathematics.

Core Competencies

Core competencies, the application of knowledge and skills in communication, interpersonal relations, and critical thinking, are designed as a fundamental element in sample activities.

Communication and interpersonal skills reflect the learner's ability to engage in an interactive process while clearly expressing ideas that lead to mutual understanding. The following skill areas are demonstrated in these activities: speaking, listening, reading, and writing. A learner who communicates effectively is able to respond to an audience, demonstrate a clear sense of purpose, organize information, and deliver information using appropriate language and nonverbal behaviors.

Interpersonal skills encompass the ability to interact appropriately with individuals or groups in a variety of settings. Effective interpersonal interactions require the use of *critical thinking skills* such as analysis, synthesis, evaluation, and application in addition to the effective demonstration of communication skills (e.g., speaking, listening, reading, and writing).

The outcome of an activity is influenced by the environment or circumstances in which the activity occurs and the skills applied (e.g., communication, interpersonal, and/or critical thinking).

A sample activity may involve the learner in the process of entering a charity run in support of cancer research.

Performance Standard

A performance standard indicates how competent or adept a learner's demonstration must be to show attainment of the content standard. In other words, a performance standard defines "how good is good enough" to meet the content standard. Performance standards specify the quality of learner performance – acceptable, excellent, or something less. The level of performance is determined by the extent to which students demonstrate command over the concepts of skills outlined in the content standards. Such command must include both quality and quantity.

Performance standards:

- Specify particular concepts and skills that the learner must know and be able to do as defined by the content standards (often in greater detail with some additional explanation of the type, quality, range and depth of the performance expectations)
- Define several different levels of achievement that outline the extent to which the learner demonstrates command over the concepts and skills within the content standards. The Arizona Adult Education Standards Initiative has adopted four levels of proficiency:

Beginning (a ways to go before passing)
Approaching (getting closer)
Met (passing)
Exceeds (excellent performance, beyond passing)

• Establish the difficulty of material with which the learner must work (e.g., vocabulary lists, spelling lists, reading lists or reading difficulty levels).

A learner at one proficiency level is able to display most of the knowledge, skills, and processes at that particular level (e.g., met level) and lower proficiency levels (e.g., approaching and beginning levels). Once assessment strategies have been adopted, the proficiency levels and their descriptors are intended to inform and guide interpretation of

the scores. In short, each proficiency level descriptor is a statement of the knowledge, skills, and abilities expected to be held by the average learner who is associated with that level.

In an attempt to ensure consistency across the various disciplines, the following terms were adopted by the Performance Standards Work Team:

•	Occasionally, seldom	Able to demonstrate skills and command of the concepts up to 49% of the time
•	Sometimes	Able to demonstrate skills and command of the concepts up to $50 - 74\%$ of the time
•	Often; most of the time	Able to demonstrate skills and command of the concepts up to $75 - 89\%$ of the time
•	Consistently	Able to demonstrate skills and command of the concepts up to $90 - 100\%$ of the time

Returning to the sports analogy, consider time trials for Olympic runners as a vehicle to motivate and measure performance. For example, Olympic runners are not simply told they have to run fast in order to qualify for the 100-yard dash. Rather, they know exactly what times they need to beat. Without performance standards, a deliberate stroll could constitute running a mile.

The learner is able to run one mile in seven minutes.

Curriculum

Curriculum is best characterized as descriptions of what should take place in the classroom and describes in greater detail the topics, themes, units, and questions contained in the content standards. Curriculum serves as a guide for instructors; addressing teaching techniques, recommending activities, scope and sequence, and modes of presentation considered most effective.

In addition, curriculum indicates those textbooks, materials, activities, and equipment that best help the learner achieve the content standards. Unlike content standards, curriculum can vary from region to region or program to program as well as from teacher to teacher, provided that the focus remains on delivering the "big" ideas and concepts that the content standards require the learner to understand and apply. Content standards are the framework for curriculum.

Curriculum within the sports analogy example include units on physiology, questions and topics to cover, suggested reading material, and training sessions needed in order to ensure the learner is able to run one mile safely and efficiently.

Assessment

Assessment defines the nature of evidence required to demonstrate that the content standard has been met (e.g., essay, solution to a mathematical problem, answers to questions in reference to a reading passage).

In the charge to the Assessment Strategies Work Team (January, 2000), Karen M. Liersch, State Director of Adult Education specified the following requirements for assessment in adult education in Arizona:

- It will insure reliability and validity
- It will provide for pre-, interim, and post-testing
- It will be aligned to and test the Arizona Adult Education Content Standards in Reading, Writing, Mathematics, and ESOL
- It will be criterion or standards referenced
- It will inform instruction
- It will serve as an accountability measure
- It will be adaptable to a variety of instructional environments
- The Assessment will accommodate learners with special needs

Assessments for the sports analogy might require the learner to run one mile, demonstrating ability to use proper form and observe safety rules of running (this would be an example of *performance-based assessment*).

Another approach might ask the learner to complete a written test, Demonstrating understanding of physiology of running (this would be an example of a *criterion-referenced test*, including multiple choice and short answer questions).

Again, the performance standard specifies the learner's degree of proficiency on those demonstrations or assessments, defining what it means to run the mile in one of three ways or levels: expert, competent, or less than competent fashion.

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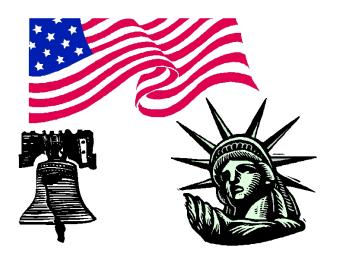
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CITIZENSHIP TEST PREPARATION STANDARDS



- Content Standards
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- Sample Activities

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Citizenship Test Preparation*

Standard I: The adult learner demonstrates knowledge of key events, momentous documents, and historic personages in United States history.

Standard II: The adult learner demonstrates knowledge of the structure, function, and symbols of the United States government and how this knowledge applies to the rights and responsibilities of becoming a citizen.

Citizenship Test Preparation – Content Standards

^{*}Standards, indicators and sub-indicators are aligned to the United States Department of Justice Immigration and Naturalization Service Citizenship Examination.

Standard I: The adult learner demonstrates knowledge of key events, momentous documents, and historic personages in United States history.

Indicator A: Demonstrates knowledge of the founding period of that part of the New World that would eventually become known as the United States of America including:

- 1. Who the Pilgrims were
- 2. Where the Pilgrims came from
- 3. Why the Pilgrims immigrated to the New World from their native land
- 4. By what means the Pilgrims came to the New World
- 5. Who helped the Pilgrims establish themselves in their new homeland
- 6. How Native Americans helped the Pilgrims establish themselves in their new homeland
- 7. The symbolism of the first holiday the Pilgrims celebrated in the New World
- 8. Why the early settlers came to Jamestown

Indicator B: Demonstrates knowledge of the Declaration of Independence and the Revolutionary War including:

- 1. The basic belief "all men are created equal" that is the foundation of the Declaration of Independence
- 2. When the Declaration of Independence was adopted
- 3. The identity of the main writer of the Declaration of Independence
- 4. The country that the American colonists fought during the Revolutionary War
- 5. The date of Independence Day

Indicator C: Demonstrates knowledge of historical personalities, famous statements or speeches, and documents reflecting the spirit of "Americanism" including:

- 1. Patrick Henry: "Give me liberty or give me death"
- 2. Thomas Jefferson: The Declaration of Independence (July 4, 1776)
- 3. George Washington as Father of our Country
- 4. Abraham Lincoln: Emancipation Proclamation
- 5. Martin Luther King, Jr. as Civil Rights leader

Indicator D: Demonstrates knowledge of the main participants in World War II including:

- 1. The principle nations who were aligned against the United States during World War II and why
- 2. The principle nations who were allied with the United States during World War II and why

Indicator E: Demonstrates knowledge of key United States institutions including:

- 1. The name and location of the capital (city) of the United States
- 2. The location and the significance of the White House
- 3. The name and location of the capital (city) of Arizona

Standard II: Demonstrates knowledge of the structure, function, and symbols of the United States government and how this knowledge applies to the rights and responsibilities of becoming a citizen.

Indicator A: Demonstrates knowledge of the states that constitute the United States of America including:

- 1. How many states there are in the United States
- 2. What the 13 original states were called
- 3. Which were the 49th and 50th states to join the Union

Indicator B: Demonstrates knowledge of the flag and the national anthem of the United States of America including:

- 1. The colors of the United States flag
- 2. How many stars there are on the United States flag
- 3. The color of the stars on the United States flag
- 4. What the stars on the United States flag represent
- 5. How many stripes there are on the United States flag
- 6. The colors of the stripes on the United States flag
- 7. What the stripes on the United States flag represent
- 8. The title of the national anthem and who authored it

Indicator C: Demonstrates knowledge of the United States' form of government and the United States Constitution including:

- 1. The name of the United States form of government and its meaning
- 2. The supreme law of the United States
- 3. What the United States Constitution is called
- 4. What year the United States Constitution was written
- 5. What the Introduction to the United States Constitution is called
- 6. Whose rights are guaranteed by the United States Constitution and the Bill of Rights
- 7. What the first ten amendments to the United States Constitution are called
- 8. What the Bill of Rights is
- 9. Whether or not the United States Constitution can be changed, and if so, what such a change would be called
- 10. How many changes or amendments to the United States Constitution have been made to date
- 11. At least one right guaranteed by the first amendment to the United States Constitution

Citizenship Test Preparation - Content Standards

Indicator D: Demonstrates knowledge of the Legislative Branch of the United States government including:

- 1. That the legislative branch is one of the three branches of the United States government
- 2. What government body makes federal laws in the United States
- 3. The government bodies that make up the United States Congress
- 4. Where Congress meets
- 5. The duties of Congress
- 6. Who elects members of Congress
- 7. How many senators there are in the United States Congress
- 8. The length of term of United States Senators
- 9. How many times a United States Senator can be re-elected
- 10. Why there are 100 senators in the United States Congress
- 11. The names of the state's two United States Senators
- 12. How many representatives there are in the United States Congress
- 13. The length of term of United States Representatives
- 14. How many times a United States Representative can be re-elected

Indicator E: Demonstrates knowledge of the Executive Branch of the United States government and the offices of the President of the United States, the governor of the state, and the mayor or city manager of a city or town including:

- 1. That the executive branch is one of the three branches of the United States government
- 2. The first President of the United States
- 3. Which president is called the "Father of Our Country"
- 4. The name of the special group that advises the President
- 5. Who was president during the Civil War
- 6. Which president freed the slaves
- 7. Who elects the President of the United States
- 8. The length of term of the President
- 9. How many terms the President can serve
- 10. At least one of the requirements a person must meet in order to be eligible to become President of the United States
- 11. Who signs a bill into law
- 12. Who has the power to declare war
- 13. Who is Commander-in-Chief of the United States military
- 14. Which president was the first Commander-in-Chief of the United States military
- 15. Who becomes president of the United States if the President should die while in office
- 16. Who becomes president of the United States if both the President and Vice President die while in office
- 17. In which month citizens vote for the President
- 18. In which month the President is inaugurated
- 19. What constitutes the Executive Branch of the United States government
- 20. What the chief executive of a state is called
- 21. The name of the state governor
- 22. Which city is the capital of the state

- 23. What the chief executive of a city is called
- 24. The name of the mayor of the city in which the student intends to reside and work

Indicator F: Demonstrates knowledge of the Judiciary Branch of the United States government including:

- 1. That the judiciary branch is one of the three branches of the United States government
- 2. What constitutes the Judiciary Branch of the United States government
- 3. The highest court in the United States
- 4. The duties of the Supreme Court
- 5. Who appoints Supreme Court Justices
- 6. How many Supreme Court Justices there are
- 7. The name of the Chief Justice of the Supreme Court

Indicator G: Demonstrates a basic knowledge of voting in the United States including:

- 1. The two major political parties in the United States
- 2. The minimum voting age in the United States

Indicator H: Demonstrates knowledge of the rights and responsibilities of United States citizenship including:

- 1. The most important right granted to United States citizens
- 2. At least one benefit of being a citizen of the United States

Indicator I: Demonstrates knowledge of the INS interview process including:

- 1. What materials to take to the interview
- 2. What types of questions may be asked

Citizenship Test Preparation Performance Standards

Beginning

The student:

- provides limited personal information on simple forms
- names most of the requirements for U.S. Citizenship, (five years of permanent residency or three if married to a U.S. citizen, knowledge of history and government of the United States, ability to speak, read, and write English)
- names a few community resources
- cites some of the basic expectations of the INS interview but is not familiar with INS procedures
- knows a few of the basic concepts of citizenship, including the key elements of democracy (government of the people, participation, liberty, justice)
- describes the concept of representation and some of the key roles of government in society
- creates a limited list of avenues for political participation
- correctly answers up to 49 percent of the 100 questions on the Citizenship Test of U.S. history and government that represent the most common facts. For example, a student at this level is likely to answer the following types of questions:
 - 1. What are the colors of the flag?
 - 2. Who is the President of the United States?
 - 3. How many states are in the union?
 - 4. What is the capital of Arizona?
 - 5. Why do we celebrate the Fourth of July?

Approaching

The student:

- responds appropriately to basic personal questions in English commonly found in the interview such as "How many children do you have? What is your address?"
- reads and understands many simple directions and fills out simple forms requiring personal information
- knows the basic structure of the U.S. Citizenship interview, including:
 - 1. The oath of citizenship
 - 2. English language conversation requirements (Interviewees are asked some personal questions about their family, their time in the U.S., etc. to assure that they are conversant in English.)
 - 3. History and government question requirements (Interviewees are orally asked a maximum of ten of the one hundred questions on U.S. history and government.)
 - 4. Literacy test requirements (Interviewees are asked to read aloud two or three of the one hundred questions to determine that they are literate in English. They are also required to write one to three dictated sentences with minimal errors in English.)
 - 5. Information on application (INS agents review information on the application to make sure nothing has changed or to clarify certain points.)
- correctly answers questions on the citizenship exam with a proficiency level of 50 to 69 percent
- is familiar with the basic tenets of democracy and U.S. government
- identifies specific names and functions of government; the government related questions students are often able to answer at this level include:
 - 1. What are the three branches of government?
 - 2. What is the Constitution/Bill of Rights?
 - 3. Which branch makes the laws?
 - 4. How many senators are there?
 - 5. Can the Constitution be changed?
 - 6. Who becomes the President of the U.S. if the President should die?
- describes key facts in U.S. history as well as identifies and summarizes contents of key founding documents (e.g., the Constitution and Bill of Rights, The Declaration of Independence, Pledge of Allegiance) and knows some dates, names and specific events. The history related questions students are often able to answer at this level include:
 - 1. Who was George Washington, Martin Luther King, Abraham Lincoln?
 - 2. Why did the Pilgrims come to the United States?
 - 3. What were the first original states called?
 - 4. Name the country from which we became independent.
- knows that he or she is guaranteed rights under the Constitution and can name two rights from the Bill of Rights (e.g., freedom of speech and the right to remain silent)

Citizenship Test Preparation - Performance Standards

Met

The student:

- knows and uses vocabulary specific to the interview application and exam. For example: the student can describe the benefits of becoming a U.S. citizen, including 1) the ability to vote, 2) the right to hold federal jobs, and 3) the right to have a U.S. passport
- expresses his/her personal goals for becoming a citizen and discusses questions and answers on N-400 application for citizenship, including explaining any absences from the United States since becoming permanent residents, recalling the dates and locations of employment for the past five years, and the ability to answer questions about marital/familial history
- correctly completes the citizenship application and is able to answer even grammatically difficult questions (e.g., Have you ever committed a crime for which you were not legally guilty?)
- successfully and confidently completes the process of a practice interview, including knowing where the exam will take place, the procedure upon arrival, having proficient interview skills, and knowing how to ask for clarification when needed
- correctly answers between 70 89 percent on the citizenship exam both oral and written form
 - 1. What are the 49th and 50th states of the union?
 - 2. How many congressional Representatives are there?
 - 3. How many amendments are there in the Constitution?
 - 4. What are the duties of the Supreme Court?
 - 5. Who is the Chief Justice of the Supreme Court?
 - 6. Who becomes President of the U.S. if the President and vice-president should die?
 - 7. For how long do we elect the congressional representatives?
- describes the meaning and importance of most of the basic rights guaranteed to all U.S. citizens.
- understands the reciprocity between rights and obligations (i.e., why enjoyment of one's rights entails respect for the rights of others)
- defines the key components of a representative democracy and identifies and knows how to contact his or her local and state representatives

Exceeds

The student:

- correctly answers at least 90 percent of the Citizenship questions both orally and in written form.
- is familiar with history beyond the one hundred questions, including identifying civil rights leaders (e.g., Cesar Chavez, Martin Luther King, Jr., Susan B. Anthony) and famous American immigrants, and describing some of the larger historical debates within United States history
- explains the key differences between political parties and some of the debates within current events. (e.g., student can analyze how the second amendment relates to gun control)
- is familiar with local, state, and federal officials, their qualifications, and some of their policies regarding current issues
- describes the process of how a bill becomes a law
- defines several key political science terms, including impeachment, recall, referendum, and initiatives
- is active in his or her community (e.g., writes or calls his/her representative, volunteers in children's schools, senior centers, or other community services)
- analyzes how most rights are implemented and secured in communities and at a state and federal level. (e.g., what recourse does an individual have when an immigration official enters private property without a warrant)

Citizenship Test Preparation Performance Standards

Citizenship Test Preparation Performance Standards		
Nature of the evidence	Applicable Indicators	
1. Students can answer open-ended or short answer questions both orally and written. Example: Who was the first president of the United States? How can you approach our support for a candidate?	All	
How can you express your support for a candidate? 2. Students can write about a specific theme (such as liberty, freedom) in U.S. history or government. Example: Students and teachers can write dialogue journals. Topics may include: Have your rights ever been violated? Describe. Pick one thing you would change if you were president? What contributions have African-Americans made in U.S. history?	All	
3. Students can orally identify and describe visual evidence, locate events on timelines, and label locations on maps. Example: Using photographs of places of importance or national leaders, students label England, the United States, and their leaders' countries of origin on a map.	All	
4. Students can compare and contrast key terms. Example: Conquerors and colonization Judiciary, Legislative, Executive Democrat and Republican	All	
5. Students can play games related to subject material. Example: Teacher can make a trivia game out of the questions on the exam. Topics might include: a. Women in U.S. history b. U.S. Presidents c. Minorities in Politics	All	
6. Students can compare and contrast orally or in written form U.S. history and government with that of their own countries. Example: Students can discuss differences in the colonization of North and Latin America.	All	
7. Students can participate in oral debates and role plays on historical and political issues and the practice interview. Example: Students take a position supporting either an abolitionist or pro-slavery stance.	1. A, B, C, D 2. C, E, F, G, H, I	

Citizenship Test Preparation Sample Activities*

Standard I: The adult learner demonstrates knowledge of key events, momentous documents, and historic personages in United States history.

Indicator A: Demonstrates knowledge of the founding period of that part of the New World that would eventually become known as the United States of America

Family	Workplace	Community
Students discuss why they believed that	In teams, students develop an on-going "dictionary"	Students assess what contributions their particular
relocating to the United States would be better	of key words and phrases such as: discovery,	ethnic backgrounds could make to the social
for them and their family members.	England, Pilgrims, Mayflower, freedom, settlement,	fabric of the United States.
	Native Americans, Plymouth, Jamestown, holiday,	
Students outline how they overcame fears for	Thanksgiving, celebrate, Statue of Liberty.	Students discuss which nations claimed territories
themselves and convinced their family		in the New World and their contributions.
members to be unafraid when their emigration	Periodically, the class compiles, critiques, and	
decisions were finally made.	rewrites "dictionary" definitions, attempting to reach	Students role play as Pilgrims and Native
	consensus on the "best" definition for each key word	Americans, introducing themselves, explaining
Students conclude what motivated them to	and phrase.	their life styles, and attempting to establish a
resettle themselves and their families in the	Cincords and the second to the Investment	basis for peaceful co-existence.
United States.	Given the problems faced by the Jamestown	Ct. lands and the control of the con
Specify what made students decide on settling	settlers—having selected a poor settlement site,	Students summarize how they felt when they made the final decision to leave their homelands.
in	making gold hunting a priority, having a predominance of leisured "gentlemen" among their	made the final decision to leave their nomelands.
	number—students create a list of tasks that would	Students compare and contrast motivations of the
	have given the settlement a better chance of survival	Pilgrims and those who explored and settled in
	and success.	the New World before the Pilgrims arrived.
	and success.	the New World before the Frigrims arrived.
	Students determine what the Pilgrims would have	Students contrast ways North & South America
	had to accomplish before they could celebrate their	were colonized and discuss the present-day
	first Thanksgiving.	political results of those differences.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator B: Demonstrates knowledge of the Declaration of Independence and the Revolutionary War

Family	Workplace	Community
Thomas Jefferson was the main writer of the Declaration of Independence. He wrote that "all men are created equal" and that all men have the right to "life, liberty, and the pursuit of happiness." Students describe what these beliefs mean to them and their families in	Student teams continue to compile, critique, and rewrite "dictionary" key words and phrases such as: taxes, protest, independence, freedom, rights, Declaration of Independence, Thomas Jefferson, 1776, Fourth of July, Revolutionary War, George Washington.	Students compare celebrations of independence as observed in the different countries of students. Students summarize orally and/or in writing in basic English, the fundamental beliefs espoused in the Declaration of Independence.
every day life. Students discuss how different family structures align with different government styles.	Students discuss how their workplace structure aligns with different government styles.	Students analyze and debate the benefits and liabilities of monarchy vs. democracy as the form of government that would have best served the interests and welfare of the colonial United States. Students compare and contrast reasons stated in the Declaration of Independence with reasons why the Revolutionary War was actually fought. Students illustrate how United States history might have been different if the Declaration of Independence had not been created.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator C: Demonstrates knowledge of historical personalities, famous statements or speeches, and documents reflecting the spirit of "Americanism"

Family	Workplace	Community
Students discuss a family member who acted as a role model (of courage, strength, etc.).	Student teams continue to compile, critique, and rewrite "dictionary" key words and phrases such as: George Washington, Patrick Henry, Abraham	Students compose a "Negro spiritual" that reflects the life of slaves of the time period.
Students assess political leaders who could be considered positive role models and judge how those leaders have impacted students' lives.	Lincoln, Civil War, slaves, cotton plantations, North, South, 1863, Civil Rights Movement, Martin Luther King, non-violent protest.	Students compose a "Civil War song" that reflects the life of a soldier—from the Northern <i>or</i> Southern armies—during that time period.
Students compare similar political leaders who could be considered positive role models in the students' native country.	Students measure the effects of the Emancipation Proclamation on employment and the economy in the North and South for the remainder of the Civil War and afterwards.	Students role play a debate on Civil Rights between Martin Luther King, Jr. and a Mississippi segregationist. Students reconstruct the life of a slave, incorporating details from conditions of slavery that may have existed in the past in other countries.
		Students justify the sentiments expressed in the Gettysburg Address.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator D: Demonstrates knowledge of the main participants in World War II

Family	Workplace	Community
Students determine the impact of World War II on their own lives and on their native countries.	Student teams continue to compile, critique, and rewrite "dictionary" key words and phrases such as: allies, enemies, Germany, Italy, 1941, Japan, United Nations.	Students contrast life in the United States with life in their native countries during World War II.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator E: Demonstrates knowledge of key United States institutions, including their locations

Family	Workplace	Community
Students discuss a trip in the U.S. that their	Student teams continue to compile, critique, and	Students identify the location and importance of
families took.	rewrite "dictionary" key words and phrases such as:	the local courthouse, police station and town hall.
	Washington, D.C., Senate, House of Representatives, Lincoln Memorial, Congress, Washington	After watching a video or videog of Washington
	Monument, Capitol Building, White House, Phoenix.	After watching a video or videos of Washington, D.C., students critique "the tour."
	Wondinent, Capitor Building, write House, Flochix.	D.C., students critique the tour.
		Students compare the images represented by the Washington Monument and the Lincoln
		Memorial.
		Students grade the effectiveness of a town hall or city council meeting that is attended or watched on television.
		Students compare monuments and memorials in their native countries with those found in the United States.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Standard II: The adult learner demonstrates knowledge of the structure, function, and symbols of the United States government and how this knowledge applies to the rights and responsibilities of becoming a citizen.

Indicator A: Demonstrates knowledge of the states that constitute the United States of America

Family	Workplace	Community
Students discuss why their families settled in	Student teams continue to compile, critique, and	Students discuss when Arizona became a state:
Arizona.	rewrite "dictionary" key words and phrases such as:	Who was living here, and how did people live in
	13 colonies, 50 states, union, Atlantic Ocean, Pacific	that time period? Why did Arizona become a
Students debate the advantages and disadvantages	Ocean, Canada, Mexico, North America, Arizona,	state?
of statehood as they relate to the family.	New Mexico, Utah, California, Colorado.	
		Students look through Arizona Highways
	Students debate the advantages and disadvantages of statehood as they relate to the workplace.	magazine and make a collage of the state of Arizona.
		Students locate places of interest on a map of
		Arizona.
		Students debate the advantages and disadvantages of statehood as they relate to the community.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator B: Demonstrates knowledge of the flag and the national anthem of the United States of America

Family	Workplace	Community
Students discuss how their family members show	Student teams continue to compile, critique, and	Students discuss and/or demonstrate how to show
respect to symbols or traditions of the family.	rewrite "dictionary" key words and phrases such as: flag, stars, stripes, anthem, color, banner, symbol,	respect for the flag.
Students discuss how their families show respect	Francis Scott Key, pledge, represent.	Students role play a situation involving the proper
for the flag of their native countries.	Transition Section 1203, prouge, represent.	show of respect for the flag and the national
	Students work in pairs with red and blue markers, a	anthem.
Students examine what the U.S. flag means to	yardstick and calendar sheets (14" X 20"). One student draws, the other gives instructions, and	Students discuss how the flex is treated in their
them.	together they construct the U.S. flag.	Students discuss how the flag is treated in their native countries and in the U.S.
		Students analyze the words to the national anthem.
		Students analyze the words to the pledge of allegiance.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator C: Demonstrates knowledge of the United States' form of government and the United States Constitution

Family	Workplace	Community
Students hear a presentation and participate in a discussion about immigrants' and citizens' rights. Students discuss an amendment and how it relates to the family. Students analyze how different amendments apply to the family. Students work in groups and think of other rights they feel should become amendments to the U.S. Constitution, and how they would impact the family. Students work in groups to make flash cards with	Student teams continue to compile, critique, and rewrite "dictionary" key words and phrases such as: republic, democracy, rights, amendment, supreme law, Bill of Rights, 1787, liberty, equality, justice, jury, guaranteed, warrant, right to trial, philosophy, Preamble, checks and balances system. Students work in groups to make flash cards with numbers 1 – 27. Have students pick a card, read the number and give the amendment that goes with it. Students discuss the amendment and how it relates to the workplace. Students analyze how different amendments apply to	Community Students hear a presentation and participate in a discussion about immigrants' and citizens' rights. Students discuss the Bill of Rights. Students work in groups to make flash cards with numbers 1 – 27. Have students pick a card, read the number and give the amendment that goes with it. Students discuss the amendment and how it relates to the community. Students analyze how different amendments apply to the community.
numbers 1 – 27. Have students pick a card, read the number and give the amendment that goes with it.	the workplace. Students work in groups and think of other rights they feel should become amendments to the U.S. Constitution, and how they would impact the workplace.	Students work in groups and think of other rights they feel should become amendments to the U.S. Constitution, and how they would impact the community. Students engage in role play for a representative democracy, representing different interests (e.g., business people, farmers and an elected representative).

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator D: Demonstrates knowledge of the Legislative Branch of the United States government

Family	Workplace	Community
Family Students discuss some of their family rules. Students discuss how their families resolve problems or conflicts. Students find out what the congressional representatives from Arizona think about these issues: immigration, gun control, health care, benefits from the state for poor people. Students analyze how these opinions affect the family.	Workplace Students analyze how these opinions affect the workplace.	Students can locate the city building or town hall. Students invite a city council member to speak with the class. Students invite a conflict resolution expert to speak with the class. Students write to a member of Congress about an issue of concern. Students discuss how senators and representatives with different opinions work together to pass laws. Students "create" a bill, introduce it and follow it through the process until it becomes a law. Students find out what the congressional representatives from Arizona think about these issues: immigration, gun control, health care, benefits from the state for poor people. Students analyze how these opinions affect the
		community. Students compare and contrast U.S. Senators and U.S. Congressional Representatives

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator E: Demonstrates knowledge of the Executive Branch of the United States government and the offices of the President of the United States, the governor of the state, and the mayor or city manager of a city or town

Family	Workplace	Community
Students discuss who occupies the executive seat	Student teams continue to compile, critique, and	Students make flash cards with names and offices
in their families.	rewrite "dictionary" key words and phrases such as:	of the executive branch and political figures and
	President, executive branch, Cabinet, Vice President,	offices at the state and local level. Match them.
Students discuss current events of the executive	qualifications, enforce, veto bill, White House,	
branch with their families.	electors, mayor, governor, names of current office	Students watch TV news and write three sentences
	holders.	to summarize.
Students watch and discuss TV news at home		
with their families.	Students work in teams to make flash cards with the	Students analyze the impact of an executive
Students analyze the impact of an avacutive	names of important U.S. presidents and with important events/ statements that relate to those	decision on the community.
Students analyze the impact of an executive decision on the family.	presidents.	
decision on the family.	presidents.	
	Students work in teams to design a game (e.g.,	
	Bingo, Hangman, Concentration - with facts about	
	the executive branch).	
	,	

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator F: Demonstrates knowledge of the Judiciary Branch of the United States government

Family	Workplace	Community
Students discuss consequences of breaking family rules.	Student teams continue to compile, critique, and rewrite "dictionary" key words and phrases such as:	Students locate local courthouse.
	judicial, U.S. Supreme Court, Court of Appeals, District Courts, Chief Justice, judge, appeal, explains the law, constitutional, minimum voting age (18).	Students invite a judge to give a presentation on the judicial branch and court procedures.
	Students describe possible consequences of not following policy at work.	Students describe possible consequences of not following the laws in the community.
		Students visit a courthouse and watch a trial.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator G: Demonstrates a basic knowledge of voting in the United States

Family	Workplace	Community
Students determine which family issues could be "placed on the ballot" for family input, and discuss what the advantages and/or disadvantages of doing so would be.	Student teams continue to compile, critique, and rewrite "dictionary" key words and phrases such as: ballot, election, candidate, issue, term, Democrat, Republican, voter, 26 th amendment, special interest groups, register to vote, endorse a candidate, petition. Students decide on an issue or policy at work or in the classroom, debate, and then vote on it by ballot.	Students fill out voter registration forms. Students discuss a sample ballot. Students compare and contrast the different opinions from the League of Women Voters literature. Students invite Republican and Democratic Party members to visit and share their parties' platforms, allowing for questions and answers. Students debate the different beliefs of the Republican and Democratic Parties. Students decide on a local issue in the community, debate, and then vote on it by ballot. Students compare and contrast voting in the U.S. with voting in students' native countries. Students write a paragraph on the political party that they feel they would likely support.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator H: Demonstrates knowledge of the rights and responsibilities of United States citizenship

Family	Workplace	Community
Students discuss why they want to become	Student teams continue to compile, critique, and	Students discuss the benefits, rights and
citizens.	rewrite "dictionary" key words and phrases such as:	responsibilities of citizenship.
	right, responsibility, benefit, eligible, naturalized,	
Students discuss their responsibilities as citizens	legal permanent resident, deported, petition, vote.	Students discuss their rights as residents of the
in the family.		United States.
	Students discuss their responsibilities as citizens in	
Students role play and convince a family member	the workplace.	Students examine what impact becoming a U.S.
or friend to become a citizen.		citizen will have on the community.
	Students discuss their rights as workers.	
Students examine what impact becoming a U.S.		
citizen will have on the family.	Students discuss how to respond to problems in the workplace.	
	Students examine what impact becoming a U.S. citizen will have on the workplace.	

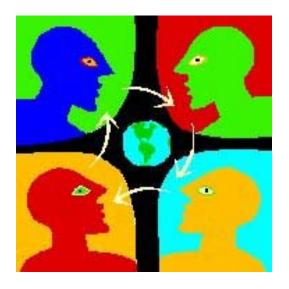
^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator I: Demonstrates knowledge of the INS interview process

Family	Workplace	Community
		Students view video or film of the interview process.
		Students invite an INS representative to explain naturalization process and/or procedures.
		Students invite a recently naturalized citizen to relate his/her experiences.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES STANDARDS



- Content Standards
- Performance Standards
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ESOL

Standard: The adult ESOL learner comprehends and communicates in written and spoken English for a variety of purposes and audiences.

Standard: The adult ESOL learner comprehends and communicates in written and spoken English for a variety of purposes and audiences.

ESOL Pre-Literacy

Indicator A: Listening

1. Demonstrates comprehension of pre-literacy vocabulary and grammatical structures in spoken contexts

Indicator B: Reading

- 1. Demonstrates reading comprehension of written forms
- 2. Recognizes sound/symbol correspondences
- 3. Recognizes upper- and lower-case letters
- 4. Recognizes basic sight words
- 5. Demonstrates text awareness through recognizing word/sentence boundaries
- 6. Comprehends and recognizes basic numerical symbols
- 7. Reads and understands short sentences

Indicator C: Speaking

1. Applies pre-literacy grammatical structures and vocabulary

Indicator D: Writing

- 1. Produces written language
- 2. Uses knowledge of phonics (sound/symbol relationships) to write words
- 3. Forms upper- and lower-case letters of the alphabet
- 4. Writes basic sight words
- 5. Creates word/sentence boundaries in writing
- 6. Writes numbers
- 7. Constructs oral forms and writes simple sentences

Functions

- 1. Gives essential personal information (e.g., name, address, age, phone)
- 2. Introduces; greets; takes leave
- 3. Gives/follows basic classroom directions and instructions

- 2 -

- 1. Demonstrates command of the verb *to be* in the present tense and in the affirmative, negative and interrogative forms
- 2. Applies knowledge of possessive and subject pronouns
- 3. Demonstrates command of verbs in the imperative form (e.g., give, take, put, look)
- 4. Demonstrates command of nouns in signature and plural

ESOL I

Indicator A: Listening

1. Demonstrates comprehension of vocabulary used in ESOL I functions and grammatical structures presented in a variety of spoken contexts

Indicator B: Reading

1. Demonstrates comprehension of vocabulary used in ESOL I functions and grammatical structures in written form, up to and including passages and compositions based on familiar contexts

Indicator C: Speaking

1. Produces oral language in different communicative contexts, applying vocabulary used in ESOL I functions and grammatical structures and demonstrates accuracy and fluency while incorporating phonological cues such as vowel and consonant sounds as well as stress and intonation patterns

Indicator D: Writing

1. Writes texts, up to and including sentences in different communicative contexts, while applying vocabulary used in ESOL I functions and grammatical structures and mechanics

- 1. Describes objects, people, places and routines
- 2. Applies classroom management language (e.g., "How do you spell...?", "Please repeat that.", "Is this correct?")
- 3. Expresses obligations, wants, feelings, and likes/dislikes
- 4. Expresses ability/inability
- 5. Asks for/grants permission
- 6. Cautions; warns
- 7. Gives expanded personal information

- 1. Demonstrates command of verbs in the interrogative, affirmative and negative forms of present, present progressive and future tenses
- 2. Demonstrates command of the verb *to be* in the past tense in the affirmative, negative, and interrogative forms
- 3. Employs the modal auxiliaries *can*, *would* (*like*), *must*, *have to*, *and may* in contexts such as expressing ability/inability
- 4. Applies knowledge of pronouns in the object and demonstrative forms
- 5. Applies knowledge of adjectives including articles and the demonstrative and possessive forms
- 6. Applies knowledge of prepositions of time and place (e.g., after, in front of)
- 7. Employs adverbs of time, frequency and manner (e.g., today, usually, quickly)

ESOL II

Indicator A: Listening

1. Demonstrates comprehension of vocabulary used in ESOL II functions and grammatical structures in spoken contexts appropriate to the level

Indicator B: Reading

1. Demonstrates comprehension of vocabulary used in ESOL II functions and grammatical structures in written form up to and including passages and compositions based on familiar and unfamiliar

Indicator C: Speaking

1. Produces oral language in different communicative contexts, applying vocabulary used in ESOL II grammatical structures and demonstrates accuracy and fluency while incorporating phonological cues such as vowel and consonant sounds as well as stress and intonation patterns

Indicator D: Writing

1. Writes texts, up to and including paragraphs in different communicative contexts, while accurately applying vocabulary used in ESOL II functions, grammatical structures and mechanics

- 1. Clarifies; checks/indicates understanding
- 2. States similarities/differences
- 3. Makes excuses; apologizes/forgives
- 4. Complains
- 5. Agrees/disagrees
- 6. Invites; accepts/declines invitations
- 7. Describes events, problems and situations

- 1. Demonstrates command of verbs in the affirmative, negative and interrogative forms of the past and past progressive tenses
- 2. Demonstrates command of modals would, and should
- 3. Demonstrates command of count/mass nouns
- 4. Applies command of comparative and superlative structures

ESOL III

Indicator A: Listening

1. Demonstrates comprehension of vocabulary used in ESOL III functions and grammatical structures in a variety of spoken contexts

Indicator B: Reading

1. Demonstrates comprehension of vocabulary used in ESOL III functions and grammatical structures in written form up to and including passages and compositions based on familiar and unfamiliar contexts

Indicator C: Speaking

1. Produces oral language in different communicative contexts, applying vocabulary used in ESOL III functions and grammatical structures and demonstrates accuracy and fluency while incorporating phonological cues such as vowel and consonant sounds as well as stress and intonation patterns

Indicator D: Writing

1. Writes multiple paragraphs in different communicative contexts, while applying vocabulary used in ESOL III functions, grammatical structures and mechanics

- 1. Summarizes, reports, informs and expresses an opinion
- 2. Gives/responds to feedback
- 3. Persuades, mediates, and negotiates
- 4. Expresses regrets
- 5. Expresses condolences, sympathy, empathy
- 6. Expresses certainty, doubt, suspicion
- 7. Reminds, interrupts

- 1. Demonstrates command of verbs in the affirmative, negative and interrogative of the present perfect and present perfect progressive tenses
- 2. Constructs present real conditional (If..., will....)
- 3. Demonstrates command of modals *should*, *must*, *might*, *ought to*, and *had better* in present tense form
- 4. Constructs habitual past (e.g., used to, would)

ESOL IV

Indicator A: Listening

1. Demonstrates comprehension of vocabulary used in ESOL IV functions and grammatical structures in a variety of spoken contexts

Indicator B: Reading

1. Demonstrates comprehension of vocabulary used in ESOL IV functions and grammatical structures in written form, including formal and informal texts

Indicator C: Speaking

1. Produces oral language in different communicative contexts applying vocabulary used in ESOL IV functions and grammatical structures and demonstrates accuracy and fluency while incorporating phonological cues

Indicator D: Writing

1. Writes simple narrative descriptions and short essays in different communicative contexts while applying vocabulary used in ESOL IV functions, grammatical structures and mechanics

- 1. Summarizes, reports and informs
- 2. Expresses condolences, sympathy, empathy
- 3. Expresses certainty, doubt, suspicion
- 4. Reminds
- 5. Interrupts
- 6. Makes predictions

- 1. Demonstrates command of verbs in the affirmative, negative and interrogative of the past perfect, future perfect and future progressive tenses
- 2. Demonstrates command of modals in past tense
- 3. Demonstrates command of reported speech
- 4. Demonstrates command of embedded questions
- 5. Constructs and applies tag and negative questions
- 6. Constructs present unreal conditional (If..., would...)

ESOL V

Indicator A: Listening

1. Demonstrate comprehension of vocabulary used in ESOL V functions and grammatical structures in a variety of spoken contexts

Indicator B: Reading

1. Demonstrates comprehension of vocabulary used in ESOL V functions and grammatical structures in written form, including formal and informal texts

Indicator C: Speaking

1. Produces oral language in different communicative contexts applying vocabulary used in ESOL V functions and grammatical structures and demonstrates accuracy and fluency while incorporating phonological cues

Indicator D: Writing

1. Writes multi-paragraph essays with a clear introduction and development of ideas in different communicative contexts while applying vocabulary used in ESOL V functions, grammatical structures and mechanics

Functions

- 1. Expresses an opinion
- 2. Gives/responds to feedback
- 3. Persuades, mediates and negotiates
- 4. Expresses regrets
- 5. Analyzes point of view

Supporting Grammar

- 1. Demonstrates command of verbs in the affirmative, negative and interrogative of the past perfect progressive and future perfect progressive tenses
- 2. Constructs past unreal conditionals (If..., would have...)
- 3. Applies structural analysis to interpret and build vocabulary (e.g., root words, prefixes, suffixes)

- 4. Demonstrates knowledge of and appropriately applies idiomatic expressions
- 5. Distinguishes between gerund and participial forms of adjectives (e.g., *interesting vs interested*)
- 6. Demonstrates command of passive voice

ESOL Performance Standards

Pre-literacy

READING CRITERIA

- Demonstrates comprehension of vocabulary related to giving personal information (e.g., name, address, birth date, age, phone number); introducing self; greeting and taking leave; giving and following basic classroom directions and instructions.
- Recognizes the grammar elements that express the functions and employs command of the verb *to be* in the present tense and in the affirmative, negative and interrogative forms; possessive and subject pronouns; verbs in the imperative form, (e.g., *give, take, put, look*); nouns in singular, plural and possessive forms
- Recognizes and uses upper and lower case letters, and numerical symbols needed for information
- Recognizes and comprehends the vocabulary related to classroom directions, signs and instructions
- Recognizes the beginning and end of words and sentences
- Recognizes and uses such materials as forms, menus, grocery lists, public signs, labels, clocks,

Beginning

On occasion, the student:

- recognizes and reads his/her first and last name
- reads and comprehends classroom and simple public information signage (exit, ⇒, ∅, in/out) (The learner demonstrates comprehension by performing or acting out the meaning of the signage.)
- reads and completes a form requesting simple information such as name, address, phone and ID number
- comprehends words and phrases relating to introductions, greetings and leave taking (hello, good-bye, How are you?, See you tomorrow) and respond appropriately
- recognizes words in singular and plural forms and point to appropriate singular or plural representations of the words
- recognizes a question, statement or negative using the verb "to be" from punctuation used or sentence structure
- recognizes and use the different subject pronouns appropriately
- reads single word vocabulary items related to the classroom, personal information, and limited social engagements
- recognizes imperative forms of verbs and demonstrates understanding through gestures or actions appropriate to the vocabulary

Approaching

Sometimes the student:

- recognizes and reads his/her first, middle and last name
- reads and comprehends classroom and simple public information signage exit/entrance, push/pull, in/out
- reads and completes approximately 50% of a form requesting simple information such as name, address, phone and ID number
- reads and comprehends words and phrases relating to introductions, greetings and leave taking (hello, good-bye, How are you?, See you tomorrow) and respond appropriately
- recognizes words in singular and plural forms
- recognizes a question, statement or negative using the verb "to be"
- recognizes and substitutes the subject pronouns appropriately
- reads and comprehends single word and phrases vocabulary items related to the classroom, personal information, social engagements
- recognizes and comprehends imperative forms of verbs

Met

Often the student:

- recognizes and reads his/her first, middle and last name and the names of family members
- reads and comprehends classroom and simple public information signage (The learner demonstrates comprehension by performing or acting out the meaning of the signage)
- reads and completes a form requesting simple information such as name, address, phone and ID number, date of birth, marital status, employment status
- comprehends words and phrases relating to introductions, greetings and leave taking (hello, good-bye, How are you?, See you tomorrow.) and responds appropriately
- recognizes words in singular and plural forms with "-s" and "-es" and point to appropriate singular or plural representations of the words
- recognizes a question, statement or negative using the verb "to be" from punctuation used or sentence structure
- recognizes and uses interrogatives "who, what"
- recognizes and uses subject pronouns appropriately.
- reads and comprehends words, phrases and short sentences using vocabulary items related to the classroom, personal information, social engagements
- recognizes and comprehends imperative forms of verbs and demonstrates understanding through gestures or actions appropriate to the vocabulary

English for Speakers of Other Languages - Performance Standards

Exceeds

Consistently the student:

- recognizes his/her first, middle and last name, names of family members and well–known personalities and businesses
- reads and comprehends classroom and simple public information signage
- reads and completes a form requesting simple information such as name, address, phone and ID number, date of birth, marital status, employment status, # and names and ages of dependents
- comprehends words and phrases relating to introductions, greetings and leave taking (hello, good-bye, How are you?, See you tomorrow and associates native language word/phrase with English word/phrase)
- recognizes words in singular and plural forms with "-s" and "-es" and irregular formations
- recognizes a question, statement or negative using the verb "to be"
- recognizes and comprehends interrogatives "who, what, what time, when"
- recognizes and comprehends subject pronouns
- reads and comprehends words, phrases and short sentences using vocabulary items related to the classroom, personal information, social engagements
- recognizes and comprehends imperative forms of verbs

WRITING CRITERIA

- Writes words in upper and/or lower case
- Write numerals
- Writes simple sentences using the verb "to be", subject pronouns and singular and plural nouns.
- Copies words, phrases and sentences, fills in blanks, completes forms and composes simple sentences.

Beginning

On occasion the student:

- writes his/her first and last name
- completes a form requiring name address and date of birth
- writes the correct pronoun related to the subject
- copies words related to the functions of Pre-literacy ESOL

English for Speakers of Other Languages - Performance Standards

Approaching

Sometimes the student:

- writes his/her first, middle initial and last name
- completes a form requiring name, address, date of birth and phone number
- substitutes the correct pronoun for a noun subject
- copies words related to the functions of Pre-literacy ESOL
- writes words in singular and plural forms using "s" for plural
- writes a simple sentence using a subject pronoun and the correct form of the verb "to be"

Met

Often the student:

- writes his/her first, middle initial and last name and names of family members
- completes a form requiring name, address, date of birth and phone number, social security or other ID number
- substitutes the correct pronoun for a noun subject
- copies words related to the functions of Pre-literacy ESOL
- writes words in singular and plural forms using "s", or "es" for plural
- writes a simple sentence using a subject pronoun and the correct form of the verb "to be"

Exceeds

Consistently, the student:

- writes his/her first, middle initial and last name and names of family members
- completes a form requiring name, address, date of birth and phone number, social security or other ID number
- substitutes the correct pronoun for the noun subject
- writes words in singular and plural forms using "s", or "es" for plural
- writes simple sentences using subject pronouns and the correct forms of the verb "to be".
- writes questions using "to be" and interrogatives such as Who, what, where.

LISTENING CRITERIA

- Comprehends the vocabulary related to basic personal information
- Comprehends the vocabulary related to classroom directions, signs and instructions
- Recognizes and comprehends the difference between a question and a statement using the verb "to be" in present tense
- Recognizes comprehends and responds to the difference between a positive and negative statements using the verb "to be"
- Understands and respond to simple introductions and personal information and simple positive and negative commands

Beginning

On occasion the student:

- responds to key words and learned expressions in simple, predictable conversations about basic personal information held at a slow, deliberate rate of speech and with a great deal of repetition and rewording
- acknowledges (through gestures) when his/her first and last name are spoken
- responds non-verbally and appropriately to directions (pick up a pencil, sit down, sign your name)

Approaching

Sometimes the student, after listening to a cue:

- responds to key words and learned expressions in simple, predictable conversations about basic personal information held at a slow, deliberate rate of speech and with a great deal of repetition and rewording
- responds orally or in writing with his/her first, middle initial and last name
- provides orally or in writing requested information such as name, address, date of birth and phone number
- substitutes orally or in writing the correct pronoun for a noun subject
- writes or responds with words in singular and plural forms using "s" for plural

Met

Often the student, after listening to a cue:

- responds to key words and learned expressions in simple, predictable conversations about basic personal information held at a slow, deliberate rate of speech with some repetition and rewording
- writes or responds to his/her first, middle initial and last name and names of family members
- name, address, date of birth and phone number, social security or other ID number

- substitutes the correct pronoun for a noun subject in writing and/or speaking
- writes or responds with words in singular and plural forms using "s", or "es" for plural
- writes or responds with a simple sentence using a subject pronoun and the correct form of the verb "to be"

Exceeds

Consistently, the student:

- responds to key words and learned expressions in simple, predictable conversations about basic personal information held at a slow, deliberate rate of speech
- writes or responds to his/her first, middle initial and last name and names of family members
- name, address, date of birth and phone number, social security or other ID number
- substitutes orally and in writing the correct pronoun for the noun subject
- writes and says words in singular and plural forms using "s", or "es" for plural
- responds orally and in writing simple sentences using subject pronouns and the correct forms of the verb "to be"
- writes or poses questions using "to be" and interrogatives such as "Who, what, where"

SPEAKING CRITERIA

- Produces oral language that express the pre-literacy ESOL functions and grammar
- Introduce self/others using basic courtesy formulas: yes, no, please, help, excuse me, sorry, hello
- Give simple commands: sit, come in, right here, over there, repeat please
- Ask for/give basic personal information: *name*, *date* of birth, age, country, language, address, phone number, time, date
- Ask/respond to basic questions/directions
- Pronounce the names of the letters
- Name and pronounce numbers: time, prices

Beginning

The student's oral production:

- uses largely accurate vocabulary that consist of single words or minimal phrases appropriate to the level
- exhibits little consistency in pronunciation, stress, inflection, and intonation of familiar words,
- includes frequent pauses and false starts, impeding understanding
- evidences frequent, significant errors in pre-literacy ESOL grammar and usage that impede understandability
- is understandable only by trained ESOL instructors

Approaching

The student's oral production:

- uses words, phrases, simple sentences appropriate to the level that are accurate but ordinary and lacking in variety
- exhibits some general accuracy in pronunciation, stress, inflection and intonation of many familiar words,
- includes pauses and false starts that frequently impede understanding
- evidences some weaknesses in pre-literacy ESOL grammar and usage and that does not block meaning but does distract the listener
- evidences some ability to self-correct with prompts
- is readily understandable for ESOL instructors

Met

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are functional and appropriate to situation and listener
- exhibits general accuracy in pronunciation, stress, inflection, and intonation of most familiar words and a few unfamiliar words although accent is detectable
- includes occasional pauses and false starts
- evidences only occasional lapses in correct pre-literacy ESOL grammar and usage
- evidences the ability to employ circumlocution, "to find another way to say things" in conversations
- is clearly understandable by ESOL instructors and other teachers

Exceeds

The learner's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are varied, natural, accurate
- exhibits accuracy in pronunciation, stress, inflection, and intonation of most familiar words and some unfamiliar words with little or no accent detectable and general fluency
- evidences strong control of pre-literacy ESOL grammar and usage
- evidences skill at circumlocution, "to find another way to say things" in conversations
- is clearly understandable by ESOL instructors and other teachers

English for Speakers of Other Languages - Performance Standards

ESOL I

READING CRITERIA

- Demonstrates comprehension of vocabulary related to expressing obligations, wants, feelings, likes and dislikes; ability and inability; permission, warnings and detailed personal information
- Reads and comprehends short simple passages that are highly predictable and related to the ESOL I functions and supporting grammar
- Recognizes the grammar elements that express the functions and employs present, present progressive and future tenses, statements, questions and commands, pronouns, adjectives, prepositions of time and place, and adverbs of time, frequency and manner
- Reads materials related to daily routines such as public signs, grocery lists, forms, schedules, diagrams, directions, recipes, children's greeting cards, menus, clothing, cooking utensils
- Recognizes sound/symbol correspondence
- Uses alphabetic order: lists, phone book, index, glossary, dictionary, catalogs
- Recognizes and uses punctuation in reading: comma, period, question mark, exclamation

Beginning

On occasion the student:

- recognizes and comprehends simple vocabulary items related to the functions of ESOL I
- connects information and events in texts to life experiences
- retells the order of important events in familiar stories
- recognizes questions, negatives and statements
- recognizes the difference between a statement and a command
- recognizes and comprehends vocabulary which indicates time, place, frequency and manner

Approaching

Sometimes the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOL I
- recognizes questions, negatives and statements
- recognizes the difference between a statement and a command
- recognizes words in singular and plural forms with "-s" and "-es" and irregular formations
- recognizes and comprehends vocabulary which indicates time, place, frequency and manner
- connects information and events in texts to life experiences
- retells the order of important events in familiar stories
- notes comprehension breakdown; use needed strategies to re-establish it
- reads aloud with fluency, accuracy, rhythm and appropriate phrasing to emphasize key ideas in the text

Met

Often the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOL I
- recognizes questions, negatives and statements
- recognizes the difference between a statement and a command
- recognizes words in singular and plural forms with "-s" and "-es" and irregular formations
- recognizes and comprehends vocabulary which indicates time, place, frequency and manner
- connects information and events in texts to life experiences
- retells the order of important events in familiar stories
- notes comprehension breakdown; use needed strategies to re-establish it
- reads aloud with fluency, accuracy, rhythm and appropriate phrasing to emphasize key ideas in the text

Exceeds

Consistently the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOL I
- recognizes questions, negatives and statements
- recognizes the difference between a statement and a command
- recognizes words in singular and plural forms with "-s" and "-es" and irregular formations
- recognizes and comprehends vocabulary which indicates time, place, frequency and manner
- connects information and events in texts to life experiences
- retells the order of important events in familiar stories
- notes comprehension breakdown; uses needed strategies to re-establish it
- reads aloud with fluency, accuracy, rhythm and appropriate phrasing to emphasize key ideas in the text

WRITING CRITERIA

- Writes sentences that address the Level I functions of obligations, wants, feelings, likes/dislikes, ability and inability, permission, warnings and detailed personal information
- Copies and writes basic sight words, words with common spelling patterns and common words connected to school and job
- Fills out simple forms and applications
- Writes narratives about simple everyday activities and personal situations that employ the Level I functions and grammar
- Writes descriptions about people, places, objects and daily routines that employ Level I functions and grammar

Beginning

The student writes a paragraph characterized by:

- some identifiable ideas but little identifiable internal structure or organization.
- word choice that is accurate but limited
- little variation in sentence types and a significant number of awkward or rambling constructions
- frequent, significant errors in ESOL I grammar and usage that detract from the meaning

Approaching

The student writes a paragraph characterized by:

- an easily identifiable purpose and main ideas although they tend to be broad, or simplistic
- an organization and structure that is skeletal with some relationship among ideas present
- words that are accurate yet lacking in variety
- good control over simple sentence structures
- repeated weaknesses in ESOL I grammar and usage that do not block meaning but do distract the reader

Met

The student writes a paragraph characterized by:

- clear and focused purpose and main ideas that address a specific topic and contain relevant supporting details
- an organizational structure that is strong enough to move the reader through the sentences without too much confusion
- words that are specific, accurate, functional and appropriate to audience
- logical and effective sentences that flow smoothly
- only occasional lapses in correct ESOL I grammar and usage

Exceeds

The student writes a paragraph characterized by:

- clear, focused ideas that hold the reader's attention
- an organization that is clear, appropriate and enhances the central ideas
- vocabulary that is clear, effective, varied, accurate and appropriate to topic
- well-constructed and well-organized sentences that are varied and flow smoothly strong control of ESOL I grammar and usage

LISTENING CRITERIA

- Understands and responds to spoken text dealing with the functions and employing the grammar of ESOL I
- Understands and responds to simple instructions and commands (e.g., come, call, listen, say it again)
- Understands and responds to basic courtesy formulas and introductions
- Understands and responds to simple questions regarding personal data (e.g., family, occupation, marital status, housing, food preferences)

Beginning

The student understands and responds to conversations:

- with some familiar vocabulary
- with a consistent need for a slower rate of speech repetition or rewording

Approaching

The student understands and responds to conversations:

- with some familiar vocabulary
- with a need for a slower rate of speech, repetition or rewording on many occasions

Met

The student understands and responds to conversations:

- with some familiar and unfamiliar vocabulary
- with some need for slower rate of speech, repetition or rewording

English for Speakers of Other Languages – Performance Standards

Exceeds

The student understands and responds to conversations:

- with familiar and unfamiliar vocabulary
- with minimal need for slower rate of speech, repetition or rewording

SPEAKING CRITERIA:

- Produces oral language that express the ESOL I functions and employ the ESOL grammar
- Pronounces the names and sounds of the letters, vowel/ consonant combinations
- Uses vocabulary pertaining to the ESOL I functions, grammar, and daily activities (e.g., money, community services, restaurants, market, household objects, medical, clothes, holidays, time, size, food, emotions, weather)
- Asks and answers questions pertaining to basic personal information (e.g., family, school, job, health, weather, daily/social activities)
- Introduces self/others using basic courtesy formulas and introductions

Beginning

The student's oral production:

- uses largely accurate vocabulary that consists of single words or minimal phrases appropriate to the level
- exhibits little consistency in pronunciation, stress, inflection, and intonation of familiar words
- evidence frequent, significant errors in ESOL I grammar and usage that impede understandability
- is understandable only by trained ESOL instructors

Approaching

The student's oral production:

- uses words, phrases, simple sentences appropriate to the level that are accurate but ordinary and lacking in variety
- exhibits some general accuracy in pronunciation, stress, inflection and intonation of many familiar words,
- includes pauses and false starts that frequently impede understanding
- evidences some weaknesses in ESOL I grammar and usage and that does not block meaning but does distract the listener
- evidences some ability to self-correct with prompts
- is readily understandable for ESOL instructors

Met

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are functional and appropriate to situation and listener
- exhibits general accuracy in pronunciation, stress, inflection, and intonation of most familiar words and a few unfamiliar words although accent is detectable
- includes occasional pauses and false starts
- evidences only occasional lapses in correct ESOL I grammar and usage
- evidences the ability to employ circumlocution, "to find another way to say things" in conversations
- is clearly understandable by ESOL instructors and other teachers

Exceeds

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are varied, natural, and accurate
- exhibits accuracy in pronunciation, stress, inflection, and intonation of most familiar words and some unfamiliar words with little or no accent detectable and general fluency
- evidences strong control of ESOL I grammar and usage
- evidences skill at circumlocution, "to find another way to say things" in conversations
- is understandable by native English speaker

ESOL II

READING CRITERIA

- Demonstrates comprehension of vocabulary related to clarifying, checking, indicating understanding; stating similarities/ differences; making excuses; apologizing, complaining, agreeing/disagreeing; inviting, accepting, declining invitations; describing events, problems and situations
- Reads and comprehends simple descriptive paragraphs that are related to the ESOL II functions and supporting grammar
- Recognizes the grammar elements that express the functions and demonstrate command of verbs in the affirmative, negative and interrogative forms of the past and past progressive tenses; modals *would* and *could*; count/mass nouns; comparative and superlative structures
- Reads informational materials related to daily routines such as public signs, job applications, schedules, timetables, maps, diagrams, directions, prescriptions, menus, doctor and dentist forms, labels, coupons, bills advertisements
- Reads reference materials such as directories, dictionaries, guide words, reader's guide, library card catalog

Beginning

On occasion the student:

- phonetically decodes new words in familiar contexts
- uses content clues to decode sentences
- describes main ideas, supporting details, and basic facts
- locates specific information (who, what, where, when, how)

Approaching

Sometimes the student:

- phonetically decodes new words in familiar contexts
- uses content clues to decode sentences (restatements, comparison)
- describes main ideas, supporting details, and basic facts
- locates specific information (who, what, where, when, how)

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Met

Often the student:

- phonetically decodes new words in familiar contexts
- uses content clues to decode sentences (restatements, comparison)
- describes main ideas, supporting details, and basic facts
- locates specific information (who, what, where, when, how)

Exceeds

Consistently the student:

- decodes phonetically most new words in familiar contexts
- uses content clues to decode (restatements, comparison)
- describes main ideas, supporting details, and basic facts locates specific information (who, what, where, when, how)

WRITING CRITERIA

- Writes text that address the Level II functions of clarifying, checking, indicating
 understanding; stating similarities/ differences; making excuses; apologizing, complaining,
 agreeing/disagreeing; inviting, accepting, declining invitations; describing events, problems
 and situations
- Fills out basic job and school forms and applications
- Writes information text such as directions (how to's, travel), explanations (rules, regulations, guides), and letters (invitation, thank you's, requests) that employ Level II functions and grammar
- Writes narratives about personal or family situations (e.g., biographies, daily activities, dialogues) that employ the Level II functions and grammar
- Writes descriptions about people, places, objects and situations that employ Level II functions and grammar and details about the location, time, and physical attributes

Beginning

The student writes paragraphs characterized by:

- some identifiable ideas but little identifiable internal structure or organization
- word choice that is accurate but limited
- little variation in sentence types and a significant number of awkward or rambling constructions
- frequent, significant errors in ESOL II grammar and usage that detract from the meaning

Approaching

The student writes a paragraph characterized by:

- an easily identifiable purpose and main ideas although they tend to be broad, or simplistic
- an organization and structure that is skeletal with some relationship among ideas present
- words that are accurate yet lacking in variety
- good control over simple sentence structures
- repeated weaknesses in ESOL II grammar and usage that do not block meaning but do distract the reader

Met

The student writes a paragraph characterized by:

- clear and focused purpose and main ideas that address a specific topic and contain relevant supporting details
- an organizational structure that is strong enough to move the reader through the sentences without too much confusion
- words that are specific, accurate, functional and appropriate to audience
- logical and effective sentences that flow smoothly
- only occasional lapses in correct ESOL II grammar and usage

Exceeds

The student writes a paragraph characterized by:

- clear, focused ideas that hold the reader's attention and include relevant details that enrich the central theme
- an organization that is clear, appropriate and enhances the central ideas
- vocabulary that is clear, effective, varied, accurate and appropriate to topic
- well-constructed and well-organized sentences that vary in structure, length, and beginnings and flow smoothly
- strong control of ESOL II grammar and usage
- a strong sense of audience and a voice that is individual and engaging

LISTENING CRITERIA

- Understands And responds to spoken text dealing with the functions and employing the grammar of ESOL II
- Understands and responds simple sets of instructions and directions relating to movement and position in space
- Understands and responds basic face-to face social interactions (e.g., greet, introduce self, ask about other person)
- Understands and responds to media presentations (e.g., simple recorded texts, radio programs)

Beginning

On occasion the student:

- responds to conversations, instructions, and social interactions held at a normal rate of speech but a great deal of repetition and rewording is needed
- on occasion identifies details and main ideas of oral presentations
- on occasion identifies signal words and expressions in oral interactions

Approaching

Sometimes the student:

- responds to conversations, instructions, and social interactions held at a normal rate of speech but sometimes repetition and rewording is needed
- sometimes identifies details and main ideas
- sometimes identifies signal words and expressions

Met

Often the student:

- responds to conversations, instructions, and social interactions held at a normal rate of speech with little need for repetition and rewording
- often identifies details and main ideas
- often identifies signal words and expressions

Exceeds

Consistently the student:

- responds to conversations, instructions, and social interactions held at a normal rate of speech without need for repetition or rewording
- consistently identifies details and main ideas
- consistently identifies signal words and expressions

SPEAKING CRITERIA

- Produces oral language that expresses the ESOL II functions and employs the ESOL II grammar
- Uses vocabulary pertaining to the ESOL II functions, grammar, and daily activities (e.g., leisure activities, stores and shopping, wildlife, sports, medical/hospital/dental, making complaints, clarifying, checking, indicating understanding; stating similarities/ differences; making excuses, apologizing, making complaints)
- Engages in basic face-to-face social interactions (e.g., greet, introduce self; ask and answer questions about occupation, work experience, family, health, hobbies, interests, needs, wants, plans, routines, emotions; respond to invitations; describe people, places, things, events, problems/solutions; agreeing/disagreeing)
- Provides sets of directions relating to movement and position in space

Beginning

The student's oral production:

- uses largely accurate vocabulary that consists of single words or minimal phrases appropriate to the level
- exhibits little consistency in pronunciation, stress, inflection, and intonation of familiar words
- includes frequent pauses and false starts, impeding understanding
- evidences frequent, significant errors in ESOL II grammar and usage that impede understandability
- is understandable only by trained ESOL instructors

Approaching

The student's oral production:

- uses words, phrases, simple sentences appropriate to the level that are accurate but ordinary and lacking in variety
- exhibits some general accuracy in pronunciation, stress, inflection and intonation of many familiar words,
- includes pauses and false starts that frequently impede understanding
- evidences some weaknesses in ESOL II grammar and usage and that does not block meaning but does distract the listener
- evidences some ability to self-correct with prompts
- is readily understandable for ESOL instructors

Met

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are functional and appropriate to situation and listener
- exhibits general accuracy in pronunciation, stress, inflection, and intonation of most familiar words and a few unfamiliar words although accent is detectable
- includes occasional pauses and false starts
- evidences only occasional lapses in correct ESOL II grammar and usage
- evidences the ability to employ circumlocution, "to find another way to say things" in conversations
- is clearly understandable by ESOL instructors and other teachers

Exceeds

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are varied, natural, accurate
- exhibits accuracy in pronunciation, stress, inflection, and intonation of most familiar words and some unfamiliar words with little or no accent detectable and general fluency
- evidences strong control of ESOL II grammar and usage
- evidences skill at circumlocution, "to find another way to say things" in conversations
- is understandable by native English speakers

ESOL III

READING CRITERIA

- Knows and understands vocabulary such as common word families, affixes, synonyms, antonyms, homonyms, homophones, homographs
- Demonstrates comprehension of vocabulary related to the ESOL III functions, including describing hypothetical events, problems and situations; asking for/giving advice and suggestions; stating intentions, possibilities, and probabilities; describing routines, situations and abilities
- Recognizes the grammar elements that express the functions and demonstrate command of verbs in the affirmative, negative and interrogative forms of the present perfect and present perfect progressive tenses; present real conditional (If...,will...); modals *should*, *must*, *might*, *ought to*, and *had better* in present tense form; habitual past, (e.g., *used to*, *would*)
- Reads and comprehends short stories and descriptive passages that are factual and concrete and are related to the ESOL III functions and supporting grammar
- Reads and comprehends informational materials such as newspaper headlines and short articles, public announcements, product labels, charts, graphs, diagrams and a variety of letters (personal, business, complaint, inquiry, acceptance, thanks)
- Reads and knows how to use reference materials such as encyclopedias and thesauruses

Beginning

On occasion the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOL III
- uses knowledge of word families, affixes, antonyms, synonyms, homophones, homonyms, and homographs to determine meaning of words in readings
- identifies purpose of text
- summarizes main idea and supporting details
- differentiates fact/opinion
- skim/scans for information

Approaching

Sometimes the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOL III
- uses knowledge of word families, affixes, antonyms, synonyms, homophones, homonyms, and homographs to determine meaning of words in readings
- identifies purpose of text
- summarizes main idea and supporting details
- differentiates fact/opinion
- skim/scans for information

Met

Often the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOL III
- uses knowledge of word families, affixes, antonyms, synonyms, homophones, homonyms, and homographs to determine meaning of words in readings
- identifies purpose of text
- summarizes main idea and supporting details
- differentiates fact/opinion
- skim/scans for information

Exceeds

Consistently the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOL III
- uses knowledge of word families, affixes, antonyms, synonyms, homophones, homonyms, and homographs to determine meaning of words in readings
- identifies purpose of text
- summarizes main idea and supporting details
- differentiates fact/opinion
- skim/scans for information

English for Speakers of Other Languages – Performance Standards

WRITING CRITERIA

- Writes text that address the Level III functions of describing hypothetical events, problems and situations; asking for/giving advice and suggestions; stating intentions, possibilities, and probabilities; describing routines, situations and abilities
- Fills out basic job and school forms and applications
- Writes information text such as directions (how to's, travel)), explanations (e.g., recipes, guides, phone messages), and letters (e.g., personal, business, complaint, inquiry, request, acceptance) that employ Level III functions and grammar
- Writes narratives about personal or family situations (e.g., autobiographies, biographies, daily activities, dialogues, goals, holidays) that employ the Level III functions and grammar
- Writes descriptions about people, places, objects and situations that employ Level III functions and grammar and details about the location, time, and physical attributes

Beginning

The student writes multiple paragraphs characterized by:

- some identifiable ideas but little identifiable internal structure or organization
- word choice that is accurate but limited
- little variation in sentence types and a significant number of awkward or rambling constructions
- frequent, significant errors in ESOL III grammar and usage that detract from the meaning

Approaching

The student writes multiple paragraphs characterized by:

- an easily identifiable purpose and main ideas although they tend to be broad, or simplistic
- an organization and structure that is skeletal with some relationship among ideas present
- words that are accurate yet lacking in variety
- good control over simple sentence structures
- repeated weaknesses in ESOL III grammar and usage that do not block meaning but do distract the reader

Met

The student writes multiple paragraphs characterized by:

- clear and focused purpose and main ideas that address a specific topic and contain relevant supporting details
- an organizational structure that is strong enough to move the reader through the sentences without too much confusion
- words that are specific, accurate, functional and appropriate to audience
- logical and effective sentences that flow smoothly
- only occasional lapses in correct ESOL III grammar and usage

Exceeds

The student writes multiple paragraphs characterized by:

- clear, focused ideas that hold the reader's attention and include relevant details that enrich the central theme
- an organization that is clear, appropriate and enhances the central ideas
- vocabulary that is clear, effective, varied, accurate and appropriate to topic
- well-constructed and well-organized sentences that vary in structure, length, and beginnings and flow smoothly
- strong control of ESOL III grammar and usage
- a strong sense of audience and a voice that is individual and engaging

LISTENING CRITERIA

- The learner understands and responds orally, in writing or through gestures
- To spoken text dealing with the ESOL III functions and employing the grammar of ESOL III
- To complex directions/ instructions for placement and location in class, at home and at work
- To social interactions (e.g., info on educational and employment background, characteristics of people, hobbies, marital status, health, plans, routines, activities)
- To media presentations (e.g., recorded texts, TV news, regular TV and radio programs)
- To oral presentations on familiar matters related to the ESOL III functions and grammar

English for Speakers of Other Languages - Performance Standards

Beginning

On occasion the student:

- comprehends conversations and directions containing familiar vocabulary but there is a need for repetition, rewording, and/or slower speech
- occasionally summarizes major points and key details of media and oral presentations

Approaching

Sometimes the student:

- comprehends conversations and directions on many familiar topics but rewording, repetition, and slower speech is needed on many occasions
- sometimes summarizes major points and key details of media and oral presentations

Met

The student often:

- comprehends conversations and directions on familiar topics spoken at normal speeds
- summarizes major points and key details of media and oral presentations

Exceeds

The student consistently:

- comprehends conversations and directions on familiar topics spoken at normal speeds
- summarizes major points and key details of media and oral presentations

SPEAKING CRITERIA

- Produces oral language that express the ESOL III functions and employ the ESOL III grammar
- Uses vocabulary pertaining to the ESOL III functions, grammar, and daily activities (e.g., leisure activities, stores and shopping, wildlife, sports, medical/hospital/dental, making complaints, clarifying, checking, indicating understanding; stating similarities/ differences; making excuses, apologizing, making complaints
- Engages in face-to-face social interactions (e.g., greet, introduce self; ask and answer questions educational and employment background, family, health, hobbies; describing hypothetical events, problems and situations; asking for/giving advice and suggestions; stating intentions, possibilities, and probabilities; describing routines, situations and abilities; asking for information on products
- Discusses topics on familiar matters such as current events, simple magazine/newspaper articles, common TV/radio programs

Beginning

The student's oral production:

- uses largely accurate vocabulary that consist of single words or minimal phrases appropriate to the level
- exhibits little consistency in pronunciation, stress, inflection, and intonation of familiar words,
- includes frequent pauses and false starts, impeding understanding
- evidences frequent, significant errors in ESOL III grammar and usage that impede understandability

Approaching

The student's oral production:

- uses words, phrases, simple sentences appropriate to the level that are accurate but ordinary and lacking in variety
- exhibits some general accuracy in pronunciation, stress, inflection and intonation of many familiar words,
- includes pauses and false starts that frequently impede understanding
- evidences some weaknesses in ESOL III grammar and usage and that does not block meaning but does distract the listener
- evidences some ability to self-correct with prompts
- sometimes uses appropriate volume, phrasing, pace and gestures to communicate meaning
- is readily understandable for ESOL instructors

Met

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are functional and appropriate to situation and listener
- exhibits general accuracy in pronunciation, stress, inflection, and intonation of most familiar words and a few unfamiliar words although accent is detectable
- includes occasional pauses and false starts
- evidences only occasional lapses in correct ESOL III grammar and usage
- evidences the ability to employ circumlocution, "to find another way to say things" in conversations
- often uses appropriate volume, phrasing, pace and gestures to communicate meaning
- is clearly understandable by ESOL instructors and other teachers

English for Speakers of Other Languages - Performance Standards

Exceeds

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are varied, natural, and accurate
- exhibits accuracy in pronunciation, stress, inflection, and intonation of most familiar words and some unfamiliar words with little or no accent detectable and general fluency
- evidences strong control of ESOL III grammar and usage
- evidences skill at circumlocution, "to find another way to say things" in conversations
- consistently uses appropriate volume, phrasing, pace and gestures to communicate meaning is understandable by native English speakers

ESOL IV

READING CRITERIA

- Knows common word derivations, roots, and affixes
- Demonstrates comprehension of vocabulary related to the ESOL IV functions, including summarizing events; reporting on and informing and reminding others about people, places, things, and events; expressing condolences, sympathy, empathy; expressing certainty, doubt, suspicion about people, places, things, and events
- Recognizes the grammar elements that express the functions and demonstrate command of verbs in the affirmative, negative and interrogative of the past perfect, future perfect and future progressive tenses; modals in past tense; reported speech; embedded questions; tag and negative questions; present unreal conditional (If..., would...)
- Reads and comprehends short stories, novels, poems.
- Reads and comprehends informational materials such as newspaper articles, public and policy announcements, manuals, functional and workplace forms (credit, insurance, rental, fact sheets, job applications), and a variety of letters (personal, business, complaint, inquiry, acceptance)

Beginning

On occasion, the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOL IV
- uses knowledge of common word derivations, roots, and affixes to determine the meaning of more complex words
- infers meaning from text
- compares/contrasts ideas in text
- identifies cause/effect in text
- identifies words used to establish tone in text
- predicts what information is likely to follow in text
- identifies plot, setting, characters in text

Approaching:

Sometimes, the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOL IV
- uses knowledge of common word derivations, roots, and affixes to determine the meaning of more complex words
- infers meaning from text
- compares/contrasts ideas in text
- identifies cause/effect in text
- identifies words used to establish tone in text
- predicts what information is likely to follow in text
- identifies plot, setting, characters in text

Met

Often, the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOLIV
- uses knowledge of common word derivations, roots, and affixes to determine the meaning of more complex words
- infers meaning from text
- compares/contrasts ideas in text
- identifies cause/effect in text
- identifies words used to establish tone in text
- predicts what information is likely to follow in text
- identifies plot, setting, characters in text

Exceeds

Consistently, the student:

- recognizes and comprehends basic vocabulary and synonyms related to the functions of ESOL IV
- uses knowledge of common word derivations, roots, and affixes to determine the meaning of more complex words
- infers meaning from text
- compares/contrasts ideas in text
- identifies cause/effect in text
- identifies words used to establish tone in text
- predicts what information is likely to follow in text
- identifies plot, setting, characters in text

WRITING CRITERIA

- Writes information text that address the Level IV grammar and functions of summarizing events; reporting on and informing and reminding others about people places, things, and events; expressing condolences, sympathy, empathy; expressing certainty, doubt, suspicion
- Fills out job and school forms and applications, tax and credit applications, and resumes
- Writes narratives about personal or family situations (e.g., autobiographies, biographies, personal histories, stories) that employ the Level IV functions and grammar
- Writes descriptions about people, places, objects and situations that employ Level IV functions and grammar and details about the location, time, and physical attributes
- Writes persuasive essays that employ Level IV functions and grammar

Beginning

The student writes short essays characterized by:

- some identifiable ideas but little identifiable internal structure or organization
- word choice that is accurate but limited
- little variation in sentence types and a significant number of awkward or rambling constructions
- frequent, significant errors in ESOL IV grammar and usage that detract from the meaning

Approaching

The student writes short essays characterized by:

- an easily identifiable purpose and main ideas although they tend to be broad, or simplistic
- an organization and structure that is skeletal with some relationship among ideas present
- words that are accurate yet lacking in variety
- good control over simple sentence structures
- repeated weaknesses in ESOL IV grammar and usage that do not block meaning but do distract the reader

Met

The student writes short essays characterized by:

- clear and focused purpose and main ideas that address a specific topic and contain relevant supporting details
- an organizational structure that is strong enough to move the reader through the sentences without too much confusion
- words that are specific, accurate, functional and appropriate to audience
- logical and effective sentences that flow smoothly
- only occasional lapses in correct ESOL IV grammar and usage

Exceeds

The student writes short essays characterized by:

- clear, focused ideas that hold the reader's attention and include relevant details that enrich the central theme
- an organization that is clear, appropriate and enhances the central ideas
- vocabulary that is clear, effective, varied, accurate and appropriate to topic
- well-constructed and well-organized sentences that vary in structure, length, and beginnings and flow smoothly
- strong control of ESOL I V grammar and usage
- a strong sense of audience and a voice that is individual and engaging

LISTENING CRITERIA

- Understands and responds to spoken text dealing with the ESOL IV functions and employing the grammar of ESOL IV
- Understands and responds to instructions on technical and non-technical tasks of medium to high difficulty
- Understands and responds to the formality level and other features of the situation (register) in a variety of social interactions, media presentations, and oral presentations

Beginning

The student:

- understands conversations with some unfamiliar and technical vocabulary at a normal rate of speech and with a great deal of repetition and rewording
- occasionally interpret s speakers' messages (both verbal and nonverbal), purposes and perspectives
- occasionally makes inferences or draw conclusions based on an oral report
- occasionally restates and executes multi-step oral instructions and directions

Approaching

The student:

- understands conversations with some unfamiliar and technical vocabulary at a normal rate of speech with some repetition and rewording
- sometimes interprets speakers' messages (both verbal and nonverbal), purposes and perspectives
- sometimes makes inferences or draw conclusions based on an oral report
- sometimes restates and executes multi-step oral instructions and directions

Met

The student:

- understands conversations with unfamiliar and technical vocabulary at a normal rate of speech with little need for repetition and rewording.
- often interprets speakers' messages (both verbal and nonverbal), purposes and perspectives
- often makes inferences or draw conclusions based on an oral report
- often restates and executes multi-step oral instructions and directions

Exceeds

The student:

- understands conversations with unfamiliar and technical vocabulary at a normal rate of speech without need for repetition and rewording.
- consistently interprets speakers' messages (both verbal and nonverbal), purposes and perspectives
- consistently makes inferences or draw conclusions based on an oral report
- consistently restates and executes multi-step oral instructions and directions

SPEAKING CRITERIA

- Uses vocabulary pertaining to the ESOL IV functions, grammar, and idioms and colloquial expressions to follow and relate stories of general popular interest
- Discusses events, activities, stories, experiences and general information of personal and popular interest employing ESOL IV functions and grammar

Beginning

The student's oral production:

- uses largely accurate vocabulary that consist of single words or minimal phrases appropriate to the level
- exhibits little consistency in pronunciation, stress, inflection, and intonation of familiar words,
- includes frequent pauses and false starts, impeding understanding
- evidences frequent, significant errors in ESOL IV grammar and usage that impede understandability

Approaching

The student's oral production:

- uses words, phrases, simple sentences appropriate to the level that are accurate but ordinary and lacking in variety
- exhibits some general accuracy in pronunciation, stress, inflection and intonation of many familiar words,
- includes pauses and false starts that frequently impede understanding
- evidences some weaknesses in ESOL IV grammar and usage and that does not block meaning but does distract the listener
- evidences some ability to self-correct with prompts
- sometimes uses appropriate volume, phrasing, pace and gestures to communicate meaning
- is readily understandable for ESOL instructors and other teachers

Met

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are functional and appropriate to situation and listener
- exhibits general accuracy in pronunciation, stress, inflection, and intonation of most familiar words and a few unfamiliar words although accent is detectable
- includes occasional pauses and false starts
- evidences only occasional lapses in correct ESOL IV grammar and usage
- evidences the ability to employ circumlocution, "to find another way to say things" in conversations
- often uses appropriate volume, phrasing, pace and gestures to communicate meaning
- is understandable by native speakers

Exceeds

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are varied, natural, accurate
- exhibits accuracy in pronunciation, stress, inflection, and intonation of most familiar words and some unfamiliar words with little or no accent detectable and general fluency
- evidences strong control of ESOL IV grammar and usage
- evidences skill at circumlocution, "to find another way to say things" in conversations
- consistently uses appropriate volume, phrasing, pace and gestures to communicate meaning is clearly understandable by native English speakers

English for Speakers of Other Languages – Performance Standards

ESOL V

READING CRITERIA

- Applies structural analysis to interpret and build vocabulary (e.g., word origins, derivations, root words, prefixes, suffixes)
- Demonstrates knowledge of and appropriately applies idiomatic and colloquial expressions
- Demonstrates comprehension of vocabulary related to the ESOL IV functions, including expressing an opinions about people, places, events and things; giving/responding to feedback; persuading, mediating and negotiating regarding problems and issues; expressing regrets; analyzing point of view
- Recognizes the grammar elements that express the functions and demonstrates command of verbs in the affirmative, negative and interrogative of the past perfect progressive and future perfect progressive tenses; past unreal conditionals (e.g., if..., would have...); gerund and participial forms of adjectives (e.g., *interesting vs interested*; passive voice)
- Reads and comprehends classic and contemporary literature
- Reads and comprehends informational materials such as newspaper articles, editorials and specialized articles; public and policy manuals, research reports, functional and workplace forms (business proposals, workplace standards, legal documents), and a variety of letters (personal, formal business, complaint, inquiry, acceptance)

Beginning

The student occasionally:

- applies knowledge of word origins, derivations, roots, affixes, synonyms, antonyms and idioms to determine the meaning of words and phrases
- makes and supports judgments about text
- interprets register and tone of text
- identifies author's point of view, opinion, and bias in text

Approaching

The student sometimes:

- applies knowledge of word origins, derivations, roots, affixes, synonyms, antonyms and idioms to determine the meaning of words and phrases
- makes and supports judgments about text
- interprets register and tone of text
- identifies author's point of view, opinion, and bias in text

Met

The student often:

- applies knowledge of word origins, derivations, roots, affixes, synonyms, antonyms and idioms to determine the meaning of words and phrases
- makes and supports judgments about text
- interprets register and tone of text
- identifies author's point of view, opinion, and bias in text

Exceeds

The student consistently:

- applies knowledge of word origins, derivations, roots, affixes, synonyms, antonyms and idioms to determine the meaning of words and phrases
- makes and supports judgments about text
- interprets register and tone of text
- identifies author's point of view, opinion, and bias in text

WRITING CRITERIA

- Writes information and persuasive essays that address the Level V grammar and functions of
 expressing an opinion about people, places, events and things; giving/responding to feedback;
 persuading, mediating and negotiating regarding problems and issues; expressing regrets;
 analyzing point of view
- Fills out job and school forms and applications, tax and credit applications, and resumes
- Writes narratives about personal or family situations (e.g., autobiographies, biographies, fantasies, folktales) that employ the Level V functions and grammar
- Writes descriptions about people, places, objects and situations that employ Level V functions and grammar and details about the location, time, and physical attributes

Beginning

The student writes multi-paragraph essays characterized by:

- some identifiable ideas but little identifiable internal structure or organization
- word choice that is accurate but limited
- little variation in sentence types and a significant number of awkward or rambling constructions
- frequent, significant errors in ESOL V grammar and usage that detract from the meaning

Approaching

The student writes multi-paragraph essays characterized by:

- an easily identifiable purpose and main ideas although they tend to be broad, or simplistic
- an organization and structure that is skeletal with some relationship among ideas present
- words that are accurate yet lacking in variety
- good control over simple sentence structures
- repeated weaknesses in ESOL V grammar and usage that do not block meaning but do distract the reader

Met

The student writes multi-paragraph essays characterized by:

- clear and focused purpose and main ideas that address a specific topic and contain relevant supporting details
- an organizational structure that is strong enough to move the reader through the sentences without too much confusion
- words that are specific, accurate, functional and appropriate to audience
- logical and effective sentences that flow smoothly
- only occasional lapses in correct ESOL V grammar and usage

Exceeds

The student writes multi-paragraph essays characterized by:

- clear, focused ideas that hold the reader's attention and include relevant details that enrich the central theme
- an organization that is clear, appropriate and enhances the central ideas
- vocabulary that is clear, effective, varied, accurate and appropriate to topic
- well-constructed and well-organized sentences that vary in structure, length, and beginnings and flow smoothly
- strong control of ESOL IV grammar and usage
- a strong sense of audience and a voice that is individual and engaging

LISTENING CRITERIA

- Understands and responds to instructions on technical and non-technical tasks of medium to high difficulty in person or by phone (react to sequencing, transitional, and focusing signals)
- Understands and responds to the formality level and other features of the situation (register) in social situations, media, and oral presentations including mood, attitudes, feelings
- Understands and responds to jokes and cultural allusions

Beginning

The student:

- understands conversations with some unfamiliar and technical vocabulary at a normal rate of speech and with a great deal of repetition and rewording
- occasionally paraphrases the speaker's purpose and point of view, occasionally identifies the tone, mood and emotion conveyed in the oral communication
- occasionally formulates judgments about the ideas under discussion
- occasionally restates and executes multi-step oral instructions and directions

Approaching

The student:

- understands conversations with some unfamiliar and technical vocabulary at a normal rate of speech with some repetition and rewording
- sometimes paraphrases the speaker's purpose and point of view
- sometimes identifies the tone, mood and emotion conveyed in the oral communication
- sometimes formulates judgments about the ideas under discussion
- sometimes restates and executes multi-step oral instructions and directions

Met

The student:

- understands conversations with unfamiliar and technical vocabulary at a normal rate of speech with little need for repetition and rewording
- often paraphrases the speaker's purpose and point of view
- often identifies the tone, mood and emotion conveyed in the oral communication
- often formulates judgments about the ideas under discussion
- often restates and executes multi-step oral instructions and directions

Exceeds

The student:

- understands conversations with unfamiliar and technical vocabulary at a normal rate of speech without need for repetition and rewording.
- consistently paraphrase the speaker's purpose and point of view
- consistently identifies the tone, mood and emotion conveyed in the oral communication
- consistently formulates judgments about the ideas under discussion
- consistently restates and executes multi-step oral instructions and directions

SPEAKING CRITERIA

- Knows and uses vocabulary, idioms, and colloquial expressions, and technical jargon to
 follow and relate stories of general popular interest and information from own life, culture
 and for field of study or work
- Represents and defends opinions/point of view on events, activities, stories, experiences and general information of personal and popular interest employing ESOL V functions and grammar

Beginning

The student's oral production:

- uses largely accurate vocabulary that consist of single words or minimal phrases appropriate to the level
- exhibits little consistency in pronunciation, stress, inflection, and intonation of familiar words
- includes frequent pauses and false starts, impeding understanding
- evidences frequent, significant errors in ESOL V grammar and usage that impede understandability

Approaching

The student's oral production:

- uses words, phrases, simple sentences appropriate to the level that are accurate but ordinary and lacking in variety
- exhibits some general accuracy in pronunciation, stress, inflection and intonation of many familiar words,
- includes pauses and false starts that frequently impede understanding
- evidences some weaknesses in ESOL V grammar and usage and that does not block meaning but does distract the listener
- evidences some ability to self-correct with prompts
- sometimes uses appropriate volume, phrasing, pace and gestures to communicate meaning
- is readily understandable for ESOL instructors and other teachers

Met

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are functional and appropriate to situation and listener
- exhibits general accuracy in pronunciation, stress, inflection, and intonation of most familiar words and a few unfamiliar words although accent is detectable
- includes occasional pauses and false starts
- evidences only occasional lapses in correct ESOL V grammar and usage
- evidences the ability to employ circumlocution, "to find another way to say things" in conversations
- often uses appropriate volume, phrasing, pace and gestures to communicate meaning
- is understandable by native speakers

Exceeds

The student's oral production:

- uses words, phrases, simple and complex sentences appropriate to the level that are varied, natural, accurate
- exhibits accuracy in pronunciation, stress, inflection, and intonation of most familiar words and some unfamiliar words with little or no accent detectable and general fluency
- evidences strong control of ESOL V grammar and usage
- evidences skill at circumlocution, "to find another way to say things" in conversations
- consistently uses appropriate volume, phrasing, pace and gestures to communicate meaning is clearly understandable by native English speakers

ESOL Sample Activities*

Standard: The adult ESOL learner comprehends and communicates in written and spoken English for a variety of purposes and audiences

ESOL Pre-Literacy

FUNCTION 1: Gives essential personal information

Supporting Grammar/Vocabulary	Family		
Present tense to be in affirmative/negative	Speaking:	Students say ages of family members.	
Vocabulary: family relationship words, (e.g., mother, father, brother)			
Pronunciation: Difference between teens and multiples of 10 (e.g., <i>thirteen/thirty</i>)	Listening/ Writing:	Classmates write corresponding numerical symbol and family relationship vocabulary.	
	Reading:	Students match numerical symbols with written names of family members, each of which are listed in columns.	

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 2: Introduces; greets; takes leave

Supporting Grammar/Vocabulary		Community
	Speaking:	Students role play introducing a friend at a party.
Present tense to be in affirmative/negative		Give friend's name and country.
		Friend responds appropriately to the introduction.
Preposition from		Students take friendly leave of one another as new person is introduced to others at party.
Vocabulary:	Writing:	Teacher writes names and countries/cities of students in class.
Idioms: Nice to meet you. See you later	willing.	Students copy names and countries/cities from board.
Idionis. Nice to meet you. See you tuter		Students copy names and countries/cities from board.
Pronunciation:	.	
Contraction: I'm, he's she's	Listening/ Reading:	Teacher creates statements from the dialogue students create. Students listen and circle names of persons and countries/cities.
	Reading.	names of persons and countries/cities.
Intonation of Wh- (who, what, when, where, why,		
how, how many, how much) and yes/no questions		
Sentential stress:		
Nice to meet you.		
Nice to meet you, too.		

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 3: Gives/follows basic classroom directions and instructions

Supporting Grammar/Vocabulary	Workplace		
Commands	Listening:	Students respond to multi-step procedures for turning off a computer.	
Prepositions	Speaking:	Students work in pairs and tell each other how to turn off the computer.	
Vocabulary: first, then, next, etc.			
	Writing:	Students write a "pass down" (note) to the person on the next shift about how to turn off the computer.	
	Reading:	Students read each other's "pass downs" and turn off their computers by following the instructions.	

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ESOL I

FUNCTION 1: Describes objects, people, places, and routines

Supporting Grammar/Vocabulary	Family		
Present tense	Speaking:	Students describe daily routines. "I get up at 8:00 and I take a shower. I drink two cups of coffee before work."	
Pronouns			
Noun/adjective order Prepositions	Writing:	Students write routines described above.	
Vocabulary: every day, never, always, sometimes	Listening:	Students circle picture of task being described.	
	Reading:	Students sequence a scrambled strip story of a classmate's daily routine.	

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 2: Applies classroom management language (e.g., "How do you spell...?", "Please repeat that," "Is this correct?")

Supporting Grammar/Vocabulary		Workplace
Present tense in affirmative/negative.	Writing:	In pairs, students create a brief phone message to be communicated to a coworker.
Questioning in affirmative		
Vocabulary: Modals can, could	Reading:	Students pair up with new partner. Pairs exchange written phone messages and read for comprehension, asking clarification questions from partner/teacher.
	Speaking/ Listening	Students pair up with another new partner and simulate a phone conversation.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 3: Expresses obligations, wants, feelings, and likes/dislikes

Supporting Grammar/Vocabulary	Community		
Present tense in affirmative/negative	Writing:	Students develop and write a list of needs that could possibly be met by classmates.	
Questioning in affirmative/negative Adjectives: sad, happy, etc.	Reading:	Students read their list of needs aloud.	
Vocabulary: feel, want to, have to, need to, prefer, like/dislike, because, can't stand	Speaking:	Students formulate questions to find out who can help them meet each need.	
	Listening:	Students listen to questions from other students to see if they can meet their needs.	

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 4: Expresses ability/inability

Supporting Grammar/Vocabulary	Family	
Wh- and yes/no questions	Speaking:	Students practice asking/answering about activities they can/cannot do.
Conjunctions: but, and		Question: Do you know how to ride a bike? Answer: Yes. Can you swim?
Vocabulary: can, know how to in affirmative/negative	Writing:	Students graph their abilities in form of grid or Venn diagram.
	Listening:	Teacher reads statements about student's abilities based on the graph in front of class. Students respond with true/false answers.
	Reading:	Students read sentences such as " can drive a truck, but he doesn't know how to play soccer." Students interview classmates to match the person with the written statement.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 5: Asks for/grants permission

Supporting Grammar/Vocabulary		Family
Questioning in affirmative/negative	Speaking:	Students practice dialogues between child and parent:
		A: Mom, can I stay over night at's house?
Present tense		B: You know you're not allowed to on a school night. A: How about Saturday?
Future tense		B: I'll think about it.
Tutture terrise		B. I II tillik doodt it.
Vocabulary: may, can, allowed to, would you mind in affirmative/negative	Writing:	Students make a list of family rules they have.
		Students write a family story about their parents' rules when the students were children.
	Reading:	Students read aloud each other's family rules.
	Listening:	Students have to decide who wrote the list that is being read.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 6: Cautions; warns

Supporting Grammar/Vocabulary	Workplace		
Commands	Speaking:	Students look at pictures of worksites and role play making safety recommendations to workers at the worksites.	
Modals: must, have to			
Vocabulary: be careful not to, don't, watch out, make sure you	Writing:	Students write warnings that will be read to other students.	
	Reading:	Students read warnings to one another and match them to pictures.	
	Listening:	Students listen to teacher reading warnings and match them to pictures.	

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 7: Gives expanded personal information

Supporting Grammar/Vocabulary	Community		
Present tense <i>to be</i> in affirmative/negative	Speaking:	Students role play responding to questions about personal information at a social service agency.	
Questioning in affirmative/negative			
Numbers			
Possessives	Listening:	Students write personal information on a grid. Teacher reads statements based on the grid about students' personal information. Students listen while viewing the grid and mark true	
Vocabulary: also, age, married, single, divorced		or false for each statement.	
Pronunciation:	Writing/	Students read and fill out forms with name, address, marital status, zip code, phone, date of	
Contractions: isn't, I'm, aren't, what's	Reading:	birth, social security #, and similar information.	
Intonation of Wh- and yes/no questions			

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ESOL II

FUNCTION 1: Clarifies; checks/indicates understanding

Supporting Grammar/Vocabulary	Community		
Yes/no questions	Speaking:	Student gives oral presentation on a topic related to community (crime, health, transportation).	
Modals can, could, would in affirmative/negative		Student follows presentation by asking clarification questions ("Did you understand me?" "What wasn't clear?" "Do you have any questions?").	
Past Tense			
Pronunciation: Intonational patterns appropriate to yes/no questions and/or Wh- questions	Listening:	Classmates show comprehension by answering the questions from the presenter and asking for clarification ("Can you repeat the part about?" "I didn't understand").	
	Writing:	Student presenter writes questions for the group about the presentation prior to speaking.	
	Reading:	Students read the presenter's questions and answer them in oral or written form.	

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 2: States similarities/differences

Supporting Grammar/Vocabulary	Community		
Comparatives and superlatives (safe, safer, safest) or joined construction (more, less, most)	Speaking:	Students practice questions and answers about various aspects of life in the United States versus life in their native countries. What do you like better about living in the United States than in your native country? What	
Irregular adjectives: good, better, best/bad, worse, worst		do you like better about living in your native country than in the United States?	
Wh- questions: "difference between" "like better"	Writing:	Students write sentences comparing their hometowns to the city they live in now.	
	Reading:	Students read their sentences out loud to the group.	
	Listening:	Students listen to sentences and try to guess where a student is from.	

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 3: Makes excuses; apologizes/forgives

Supporting Grammar/Vocabulary	Family	
Past tense: I didn't mean to. It was my fault.	Speaking:	Students role play apologizing to a family member. A: I'm sorry. I ate the rest of your cake. I thought it was for me. B: That's okay, but please ask me first next time.
Future tense: I'll never do it again. It won't happen again.		
Modal in past: <i>could</i>	Listening:	Students hear a series of apologies and excuses (e.g., Maria couldn't go to work today because) which they match with the corresponding picture.
Vocabulary: sorry, mean to, fault		
	Writing:	Students write a letter to family members apologizing and asking for forgiveness for a past offense.
	Reading:	Students read each other's letters and make corrections and suggestions.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 4: Complains

Supporting Grammar/Vocabulary	Workplace	
	Speaking:	Students take turns complaining about working conditions.
Present tense		Q: What are some problems where you work?
		A: I only work 6 hours a week.
Adverbs of frequency: always, never		B: I work 10 hours and don't get overtime.
D		
Past tenses		
	Listening:	Next, students brainstorm as a large group a list of working conditions that need to be improved. Students take turns going to the board to write down the complaints contributed
		by classmates.
	Writing:	Based on the concerns generated above, students write a letter of complaint to a supervisor.
	Reading:	Students read each other's letters.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 5: Agrees/disagrees

Supporting Grammar/Vocabulary	Workplace	
Present tense in affirmative/negative	Reading:	Students read a short passage about rules and responsibilities for workers (e.g., creating rules for the classroom).
Yes/no questions		
Vocabulary: think, because, either/neither, too, so	Speaking:	Students discuss why they agree or disagree with the rules.
	Writing/ Listening:	Students in groups write their own classroom rules which they read aloud to classmates. Discussion continues until a final version of classroom rules is agreed upon.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 6: Invites; accepts/declines invitations

Supporting Grammar/Vocabulary	Family	
Simple Future tense.		
	Reading:	Teacher brings samples of wedding invitations which students compare.
Comparative & Superlative structures		
Modals Can, Could Would	Speaking/ Listening:	Students role play inviting or responding to a bachelor(ette) party invitation. Students discuss different wedding customs.
Vocabulary: Idioms (e.g., RSVP)		
Other words relating to marriage & weddings	Writing:	Students accept/decline a wedding invitation, adding a personal note to standard RSVP enclosure.

^{*} Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 7: Describes events, problems and situations

Supporting Grammar/Vocabulary	Workplace	
Past tense	Speaking:	Students verbally report an on-the-job accident to a supervisor.
Past progressive		
Yes/no questions	Listening/ Writing:	Students listen to and write up the accident report based on student's verbal information.
Clarification questions		
Pronunciation: /ed/, /t/, /d/ for past tense verbs	Reading:	Another student reads the student's written report and then verbally reports to the class the situation. Accuracy is checked by comparing it to the contents of the original report.

^{*} Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ESOL III

FUNCTION 1: Describes hypothetical problems and situations

Supporting Grammar/Vocabulary	Workplace	
Present conditional (Ifwill)	Writing:	Students generate a list of problem scenarios encountered at work.
Present perfect and present progressive		
Modal, could, would, should	Speaking/ Reading:	Students read problems and pose possible solutions for each one.
Clarification questions		
	Listening/ Speaking:	Class prioritizes solutions from most to least effective.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 2: Asks for/gives advice and suggestions

Supporting Grammar/Vocabulary	Family	
Yes/no and Wh- questions	Speaking:	Students sit in a circle with a small group of classmates and describe a problem in their family. At the end they ask, "What should I do?" (Suggestion circle)
Modals: would, should, could, must, might, ought to, had better in affirmative/negative	Listening:	Classmates listen, ask clarification questions and then each takes a turn offering advice, for example, "I think you should stay at your mom's house," or "You might try"
	Reading:	Classmates each write down a problem and swap with another student.
	Writing:	In pairs, students read one another's situations and provide written advice. Students circulate the problem descriptions, read the advice already given and add something new or agree with one listed.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 3: States intentions, possibilities and probabilities

Supporting Grammar/Vocabulary	Community	
Modals: might, could, should, would	Speaking:	Students create a phone conversation about making plans for the weekend.
Future tense: will/going to		
Ifthen (will)	Listening:	Students answer true and false questions about the phone conversation they had.
Vocabulary: maybe, probably, more than likely		
	Writing/ Reading:	Students read an unfinished story and make predictions about the ending in oral and written form.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 4: Makes small talk

Supporting Grammar/Vocabulary	Community	
Present perfect affirmative/negative	Speaking:	Students create a dialogue imagining a party setting. A: So, how have you been? I haven't seen you for a while. B: Fine, what have you been up to?
Questions in affirmative/negative		A: Oh, same old, same old.
Tag questions: You're from Phoenix, aren't you?	Listening/ Reading:	Students make inferences about the level of familiarity or comfort between the speakers based on the dialogue they heard or read.
Vocabulary: ever, never	_	
Pronunciation: Contractions: <i>I've</i> (I have), <i>how've</i> (how have)	Writing:	Students write sample small talk dialogues for a different situation (e.g., strangers on a bus, an acquaintance at the grocery store).
Tag question contractions: <i>aren't you</i> = "arncha"		

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Function 5: Describes former routines, situations and abilities

Supporting Grammar/Vocabulary	Workplace	
Habitual past Present perfect Adverbs of time, before, after, now, when, then	Speaking/ Listening: Class brainstorms a list of technological devices and mo conveniences used in the workplace. Class identifies jo "clusters" (related occupations such as construction or related jobs). Students form groups according to job cl	b office-
	Reading: Each group narrows down the list of devices/convenien pertaining to its cluster. Group composes a paragraph comparing how work was done in the past vs. how it is done now.	ces

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ESOL IV

FUNCTION 1: Summarizes; reports; informs

Supporting Grammar/Vocabulary	Community	
Reported speech	Listening/ Speaking:	Half of the students view a video clip of a crime and report to the rest of the class what happened and what was said.
Embedded questions		
Past tense		
Questions in affirmative/negative	Writing/ Reading:	Half of the students write up a description of the video clip and present it to the rest of the class. The class reads it and watches the clip to verify accuracy.
Adjectives	Treuumg.	olubs. The olubs round is und in only to volly decuracy.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 2: Expresses condolences, sympathy and empathy

Supporting Grammar/Vocabulary	Community	
Passive voice	Reading:	Students read obituaries in the newspaper.
Past tenses Vocabulary: deceased, passed away, passed on, lost, survived by, preceded in death by	Listening:	Students listen to obituaries of famous people and guess who they are.
	Speaking:	Students create a conversation between friends. One has just lost a brother.
	Writing:	Students write a sympathy card to a friend who has lost a loved one.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 3: Expresses certainty, doubt and suspicion

Supporting Grammar/Vocabulary		Community
Past modals in affirmative/negative: must have, has to have, could have	Speaking/ Listening:	Teacher sets up a scene of a murder that "took place" prior to class. Several students (one of whom is guilty) present their cases to a jury of classmates. The jury hears the evidence and deliberates to decide which one is guilty.
Future perfect: will have gone		
Expressions of certainty or doubt: <i>I doubt that I bet that I'm almost positive that</i>	Writing/ Reading:	Students write personal stories about a time they or someone they know was robbed, or make up a story about a crime. Students read an article from the paper about a crime that was committed and answer questions about it.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 4: Reminds

Supporting Grammar/Vocabulary	Family	
Perfect tenses	Speaking:	Parents are going away for the weekend. They give their teenage children instructions of chores and things that need to get done. Students role play this situation.
Commands		
Pronunciation: Should've = should of or shoulda Would've = would of or woulda	Writing:	Students write notes to their children/house sitter about what needs to be taken care of while they're gone.
	Reading:	Students read a story about a house sitter and everything s/he has done in the past three days.
	Listening:	After reading, students "receive" a phone call from the homeowners who ask questions about the chores they wanted done. They answer according to the story that was read. Owner: Did you remember to water the plants? Sitter: No. I would've, but it rained. Owner: How about taking out the recycling? Sitter: Doesn't that happen tomorrow? Owner: No! You should've done it yesterday.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 5: Interrupts

Supporting Grammar/Vocabulary		Workplace
Past tenses	Reading/	Students write down and share instances of pressing problems
Embedded questions	Writing:	that they have experienced or heard about at work
Tag & negative questions	Speaking/	Scenario: students role play interrupting their supervisor to
Expressions of conversation management, "Excuse me", "I'm sorry, but"	Listening:	inform him/her of a problem that requires immediate attention.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 6: Makes predictions

Supporting Grammar/Vocabulary	Workplace
Present unreal conditional tense (Ifwould)	Reading/ Teacher assists students in generating a list of interview questions regarding the future (e.g., "Where do you see yourself in 5 years? What is your greatest weakness and how do you
Future perfect and progressive tenses	plan to overcome it? If you found, after you took this job, that it wasn't the right one for you, how would you handle it?")
Past tense modals	Listening/ Students practice giving and answering interview questions. Speaking:

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking.

ESOL V

FUNCTION 1: Expresses an opinion

Supporting Grammar/Vocabulary	Community	
Present perfect	Writing:	Students write a descriptive paragraph of a picture (one of four brought in by teacher)
Present perfect progressive		
Yes/no questions	Speaking/ Reading:	One student reads aloud his/her description to the class.
Clarification questions		
	Listening/ Speaking:	The class listens to the description and guesses the correct picture.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking.

FUNCTION 2: Gives/responds to feedback

Supporting Grammar/Vocabulary	Workplace	
Present and past real conditionals	Speaking:	Students role play a supervisor talking to a worker about his/her performance. The boss thinks the person is a good worker, but works too slowly. The worker has to respond. (Performance review)
Past perfect tense		
Modals in past	Listening:	Students in other groups listen to the role play and give feedback.
	Writing:	Students write feedback to worker as if they were a supervisor.
	Reading:	In groups, students read the feedback about their performance.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 3: Persuades; mediates; negotiates

Supporting Grammar/Vocabulary	Community	
Negative questions (Why don't you)	Listening:	Teacher reads the class part of a story about a controversy between neighbors (e.g., a barking dog problem) but does not read the ending. Each student predicts his/her own ending to the story.
<i>Ifthen</i> statements		
Active listening statements: It sounds like you're saying	Speaking:	Students role play a mediation between the two neighbors around the issue of the barking dog. Afterwards, students return to the predictions to compare them to the results of the role play.
I heard you say	Writing:	Students write a story about a conflict they had with another person, but omit how the conflict was resolved.
	Reading:	Students read or hear the stories written by their classmates and offer solutions to resolve the conflict. "Have you tried?" "Why don't you try talking to?" After solutions are suggested, the author can tell the rest of the story about resolving this conflict.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 4: Expresses regrets

Supporting Grammar/Vocabulary	Family	
Past real/unreal conditional: If I'd known, I would have, If he hadn't been drinking, he wouldn't have	Speaking:	Students view a picture depicting the aftermath of a tragedy or accident and then form questions and answers about it. Q: How could this have been prevented? A: Well, if he hadn't been driving so fast
Past real/unreal conditional in affirmative/negative questions Wish: <i>I wish I'd</i>	Reading/ Listening:	Students read or listen to a passage about a disaster and then discuss how the events could have been prevented.
	Writing:	Students write about an accident that they were involved in, describing the accident and expressing regret about it ("I wish I hadn't").

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

FUNCTION 5: Analyze point of view

Supporting Grammar/Vocabulary	Community	
Passive voice	Reading:	Students read obituaries in the newspaper.
Past tenses Vocabulary: deceased, passed away, passed on, lost, survived by, preceded in death by	Listening:	Students listen to obituaries of famous people and guess who they are.
	Speaking:	Students create a conversation between friends. One has just lost a brother.
	Writing:	Students write a sympathy card to a friend who has lost a loved one.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

GLOSSARY OF ESOL TERMS

adverbs

- a. frequency always, usually, often, sometimes, seldom, never,
- b. manner slowly, quickly, carefully, happily, sadly, . . .
- c. time after, before, when, while, since, until, . . .

affirmative verb forms - regular or positive forms (I eat pizza. He eats tacos.)

antonym - a word of opposite meaning

authentic material - material (aural, oral, written, visual) that is actually used in a situation, usually the same as a native speaker would use (application forms, newspaper clippings and articles, radio programs, news broadcasts,)

auxiliaries – see MODALS

basic features of a text - the different parts of a book, title page, contents page, glossary, index

basic personal information - name, address, city, state, zip, phone number, age, nationality, marital status, social security number

basic survival situations - situations that require the use of the language to communicate the wants, needs and desires of the student, such as talking to the landlord, child's teacher, people at the store, the boss, others at work, emergency services, doctors

characters - the actors in a story

content clues - information found in the material that helps decide the meaning of a word

conditionals (if clauses) - forms used to state a cause and effect event or situation; state a situation that will cause a particular result

Present/future unreal or Conditional 2 is used when the action of the if-clause is improbable or unlikely

If + past, would + infinitive If it rained, I would go home early.

Past/unreal or Conditional 3 is used when the action of the if-clause is impossible If + past perfect, would have + past participle If it had rained, I would have gone home.

decode - use various strategies (phonics, context clues, root word, . . .) to find a meaning for a word

descriptive passage - a brief written account describing something

dialogue - usually a formalized or directed conversation

- ESOL English as a Second Language or English for Speakers of Other Languages
 - L1- language one- the first language of the student, the one they speak at home
 - L2- language two- the second language of the student, the one they are learning

embedded questions - used when questions begin with Do you know Could you tell me. . . this will change word order. (Do you know when the movie starts? Could you tell me where the bank is?)

expository - to explain, convey information, tell how to, tell purpose

extemporaneous - not planned before, impromptu

familiar - information the student has learned from previous lessons or knows from life experience unfamiliar- new subject or topic for student, no previous teaching or lessons

fluency - how fluid the language is, the natural flow of the language-effortlessly smooth and rapid

functional text - written material with a special purpose

future - see TENSES

future perfect - see TENSES

future perfect progressive - see TENSES

future progressive - see TENSES

group or pair work - when students work in pairs or groups to practice skills, such as a dialogue, describing something, asking for information

homographs - spelled alike but different in meaning and pronunciation (the noun conduct and the verb conduct)

homonym - spelled and pronounced alike but different in meaning (pool, pool)

homophones - pronounced alike but different in meaning and spelling (son, sun)

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imperative - see TENSES
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infer (inference) - guess, surmise, suggest, conclude or derive a conclusion

informational text - written material that gives information to the reader

interpret - gather the information correctly from the material, explain and understand the material

interrogative verb forms - question forms (Are you married? Do you eat pizza?)

language functions - the different ways the language can be used such as greeting, describing, giving directions, expressing emotions, clarifying, checking, making excuses

main ideas - the central topics or point

modals (auxiliaries) - words like CAN, COULD, MAY, MIGHT, SHOULD, WILL, WOULD, MUST, OUGHT

monitor - to watch, check, guide, observe and assist

narrative passage - a brief recitation of details of a story, usually written

negative verb forms - forms that say "no" (I don't eat tacos. He didn't eat pizza.)

paraphrase - see rewording

passage - a brief portion or section

passive voice - the form used when the action is more important than who did it or it is understood who did it (John built the house in 1955 vs. This house was built in 1955. Mary can solve the problem vs. The problem can be solved.)

past - see TENSES

past perfect - see TENSES

past perfect progressive - see TENSES

past progressive - see TENSES

phonics - the sounds that letters and combination of letter make to decode or "sound out" a word

plot - the main story line

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pre-reading activities - activities that help the student to comprehend the reading material by explaining the vocabulary, discussing the major point or ideas, going over grammar points, author's point of view. . . .
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pre-taught - teacher has taught the vocabulary, grammar point or subject matter before actual activity takes place

prepositions of time and place - TIME- in, on, at, . . . PLACE- in, on, at, between, under, over...

present - see TENSES

present perfect - see TENSES

present perfect progressive - see TENSES

present progressive - see TENSES

pronouns - word used to take the place of a noun

- a. subject- I, you, he, she, it, we, they
- b. object- me, you, him, her, it, us, them
- c. possessive- mine, yours, his, hers, ours, theirs
- d. demonstrative- this, that, these, those

reported speech - used to report what someone has said. (She said she watched TV every night.)

rewording - to state the same idea but in a different way or with different words, paraphrase

role play - situation activity where each student is given a role to play, can be general role (student, salesperson, reporter,) or specific (Michael Jackson, John Wayne, Madonna,)

setting - the place where a story takes place, background, scenery

simplified - make less complicated, use easier, familiar or shorter words

small talk - everyday conversations, such as asking about health, work, school, family

sound out - to use phonics to decode a word

structural analysis - determine the different types of words (noun, verb, adj., adv.) the parts of words (prefix, suffix, endings, root)

summarize - to state the main points or topics briefly

supporting details - the examples that reinforce the main idea

syllabication - the division of words into syllable, division of word into small parts

synonym - words that have the same or similar meanings

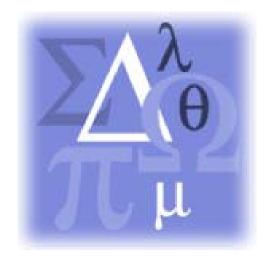
tag questions - is a question added at the end of a sentence usually to make sure their information is correct (He is from Mexico, isn't he?)

TENSES:

- future tense the tense that is used for future actions (Note: there are 4 futures--WILL for uncertainty and offers -Maybe I will go to Hawaii on my next vacation.; GOING TO- for known or somewhat planned actions I am going to Hawaii in June with my family.; PRESENT PROGRESSIVE- for certain or definitely planned actions We are staying at the Waikiki Hilton.; PRESENT- for schedules The plane leaves at 8:45 am on Saturday, June 5th.)
- **future perfect tense -** the tense that is used for actions that will continue up to a time in the future (I will have been in Phoenix for 35 years in May.)
- **future perfect progressive (continuous) tense** the tense that is used to state the duration of an action that will be in progress before another time in the future. (I will have been sleeping for 2 hours by the time he gets home.)
- **future progressive tense** the tense that is used for stating what will be happening at a certain time in the future (At 10:30 tomorrow he will be working.)
- imperative verb form commands (Sit down!)
- **past tense** the tense that is used for completed actions in the past (I ate the pizza yesterday. He went to the movies last night.)
- **past perfect tense -** tense that is used for an action that happened before another past action (When I arrived, they had already eaten.)
- past perfect progressive (continuous) tense the tense that is used to say how long something had been happening before something else. (They had been playing for 30 minutes when the storm hit.)
- past progressive (continuous) tense the tense that is used for actions that were happening at a certain time (I was eating when you called. They were working at 2:30 yesterday afternoon.)
- **present tense** the tense that is used for every day, usual and habitual actions (I eat pizza on Friday. He often eats tacos.)

- **present perfect tense** the tense that is used for the unfinished past or the action that started in the past and continues till the present (I have lived in Phoenix since 1964. He has been in class for two months.)
- present perfect progressive the tense that is used to state the duration of an action that began in the past and continues to the present. (I have been sitting here since 7. I've been thinking of you all day.)
- **present progressive (continuous) tense -** the tense that is used for at the moment or temporary actions (I am typing right now. I am reading a book about world languages.)
- **vocabulary** list of words for students to learn, group of words used in relation to a subject

MATHEMATICS STANDARDS



- Content Standards
- Performance Standards
- Sample Activities
- Glossary

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Mathematics

Standard: The adult learner develops and applies math strategies to a variety of situations.

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Standard: The adult learner develops and applies math strategies to a variety of situations.

Pre-Literacy

Indicator A: Develops and applies number sense to solve a variety of real-life problems and to determine if the results are reasonable

- 1. Recognizes relationships between real-life representations, number names, and symbolic representation of numbers
 - a. Writes and reads whole numbers between 0 and 100 as numerals
- 2. Relates counting, grouping, and place value concepts to whole numbers
 - a. Places in correct sequence whole numbers between 0 and 100
- 3. Performs the operations of addition and subtraction of one-digit numbers
 - a. Adds and subtracts whole numbers between 0 and 9 correctly
- 4. Uses coins and currency
 - a. Recognizes symbols for currency (e.g., \$, ¢)
 - b. Identifies coins and currency using pennies, nickels, dimes, quarters, half-dollars, and bills

Indicator B: Applies data collection, data analysis, and probability to interpret, predict, and/or solve real-life problems

- 1. Constructs and reads tables, charts and graphs
 - a. Collects and records data from a simple survey of at least 5 respondents
 - b. Organizes data according to choice from a simple survey of at least 5 respondents
 - c. Identifies choice receiving largest and smallest number of responses from a simple survey of at least 5 respondents
 - d. Constructs a display of data indicating responses from a simple survey of at least 5 respondents

Indicator C: Applies algebraic concepts and methods to explore, analyze or solve real-life problems

- 1. Creates, describes, and extends a variety of patterns and formulates generalizations to make predictions
 - a. Replicates a pattern using manipulatives or objects (tangrams)
- 2. Represents and describes mathematical ordering and grouping relationships
 - a. Determines the next number in a sequence of numbers up to a hundred

- 2

Indicator D: Uses geometric properties, relationships, and methods to identify, analyze and solve real-life problems

- 1. Identifies basic geometric shapes
 - a. Names simple polygons (e.g., triangle, square, rectangle)
 - b. Names simple solid geometric forms using own vocabulary

Indicator E: Applies knowledge of standard measurements to real-life situations

- 1. Selects the appropriate measurement with U.S. customary units for an object or event
 - a. Selects the appropriate device to measure the given attribute of an object or event (e.g., ruler, thermometer, measuring cup, scale, stop watch)

ABE I

Indicator A: Develops and applies number sense to solve a variety of real-life problems and to determine if the results are reasonable

- 1. Demonstrates an understanding of number meanings and relationships
 - a. Places numbers between 0 and 1000 on a number line
 - b. Describes fractions (halves, thirds, fourths) as parts of a whole
 - c. Distinguishes between odd and even numbers
- 2. Recognizes relationships between real-life representations, number names, and symbolic representation of numbers
 - a. Expresses and reads whole numbers between 0 and 1000 as numerals
 - b. Reads and writes whole numbers between 0 and 1000 as number words
 - c. Matches a fraction to a pictorial representation of halves, thirds, and fourths
 - d. Matches a number word to a pictorial representation of halves, thirds, and fourths
- 3. Represents and uses numbers in equivalent forms
 - a. Writes whole numbers between 0 and 1000 in expanded notation (e.g., 89 = 80 + 9)
 - b. Makes a model to represent a fractional representation of halves, thirds and fourths
- 4. Uses coins and currency
 - a. Expresses equal relationships of coins and currency using pennies, nickels, dimes, quarters, half-dollars, and bills up to \$5.00
- 5. Demonstrates the meaning of operations and the relationships between them
 - a. Explains that addition joins groups
 - b. Explains that subtraction decreases, takes away, compares, or finds the difference
 - c. Uses addition to check subtraction problems and vice versa
- 6. Performs the operations of addition, subtraction, multiplication, and division on whole numbers
 - a. Adds, subtracts up to 500, multiplies, and divides single digit whole numbers correctly
 - b. Selects appropriate operation in addition or subtraction to solve one-step word problems involving whole numbers up to 500.
 - c. Selects appropriate operation in multiplication and division to solve one-step word problems with single digit numbers
- 7. Selects and uses appropriate techniques to facilitate computation while solving problems and determining the reasonableness of results
 - a. Rounds whole numbers to tens and hundreds
 - b. Uses estimation to check the reasonableness of results in solving one-step word problems in addition and subtraction of whole numbers up to 500
 - c. Uses estimation to check the reasonableness of results in solving one-step word problems in multiplication and division of single-digit numbers

Indicator B: Applies data collection, data analysis, and probability to interpret, predict, and/or solve real-life problems

- 1. Constructs, reads, analyzes, and interprets tables, charts, and graphs
 - a. Makes and labels a graph (horizontal bar, vertical bar, circle graph, pictograph) from data
- 2. Predicts and measures the likelihood of events
 - a. Collects and records data from a simple one-step probability experiment
 - b. Organizes (e.g., sorts, sequences, tallies data from a simple one-step probability experiment)
 - c. Predicts the possible outcomes from a simple one-step probability experiment
 - d. Predicts the most likely or least likely outcome in a simple one-step probability experiment
 - e. Compares the outcome of the experiment to the prediction

Indicator C: Applies algebraic concepts and methods to explore, analyze or solve real-life problems

- 1. Creates, describes, and extends a variety of patterns and formulates generalizations to make predictions
 - a. Communicates orally the description of the pattern in a series of objects
 - b. Communicates orally a description of the pattern in a sequence of numbers
 - c. Extends a pattern using manipulatives or objects
 - d. Extends a pattern occurring in a sequence of numbers
- 2. Represents and describes mathematical ordering and grouping relationships
 - a. Identifies the pattern in skip counting (e.g., 2, 4, 6 add 2 to each number)
 - b. Determines the next number in a skip counting pattern (e.g., 2, 4, 6 ?)

Indicator D: Uses geometric properties, relationships, and methods to identify, analyze and solve real-life problems

- 1. Identifies and describes basic geometric shapes
 - a. Identifies the characteristics of simple polygons (e.g., triangle, square, rectangle)
 - b. Identifies the characteristics of simple solid geometric figures (e.g., cube and rectangular container)

- 1. Demonstrates that a single object or event can be measured in different ways (e.g., length,
 - mass/weight, time, capacity, temperature, area, volume)
 - a. Determines what attributes of an object or event are measurable
 - b. Identifies the appropriate type of measurement for each attribute of an object or event
- 2. Identifies the appropriate measurement with U.S. customary units for an object or event including:
 - a. Length inches, feet and yards
 - b. Capacity cups, gallons
 - c. Weight ounces, pounds, tons
 - d. Area square unit
 - e. Volume cubic unit
 - f. Time second, minute, hour, day, month, year, decade, century
 - g. Temperature degrees on Fahrenheit scale, degrees on Celsius scale
- 3. Compares units of measurement to determine equal relationships using U.S. customary units (e.g., 2 cups = 1 pint, 3 cups > 1 pint)
- 4. Makes estimation of measurement
 - a. Using U.S. customary units, estimates a measurement of a given object or event and compares the estimation to actual measurement
 - b. Evaluates the reasonableness of the estimation
- 5. Applies measurement
 - a. Solves real-life problems involving measurements using U.S. customary units

ABE II

Indicator A: Develops and applies number sense to solve a variety of real-life problems and to determine if the results are reasonable

- 1. Demonstrates an understanding of number meanings and relationships
 - a. Places numbers between 0 and 10,000 on a number line
 - b. Describes mixed numbers as parts of a whole
- 2. Recognizes relationships between real-life representations, number names, and symbolic representation of numbers.
 - a. Expresses and reads whole numbers between 0 and 10,000 as numerals
 - b. Reads and writes whole numbers between 0 and 10,000 as number words
 - c. Matches a mixed number to a pictorial representation
 - d. Matches a number word to a pictorial representation of mixed numbers
- 3. Represents and uses numbers in equivalent forms
 - a. Writes whole numbers between 0 and 10,000 in expanded notation (e.g., 89 = 80 + 9)
 - b. Makes a model to represent a fractional representation of mixed numbers
- 4. Uses coins and currency
 - a. Expresses equal relationships of coins and currency using pennies, nickels, dimes, quarters, half-dollars, and bills up to \$100.00
- 5. Demonstrates the meaning of operations and the relationships between them
 - a. Explains that multiplication is repeated addition of equal numbers and/or groups
 - b. Explains that division is repeated subtraction or placing items into groups of equal size
 - c. Uses multiplication to check division problems and vice versa
- 6. Performs the operations of addition, subtraction, multiplication, and division on whole numbers
 - a. Adds, subtracts, multiplies, and divides whole numbers between 0 and 1,000 correctly
 - b. Selects appropriate operation to solve one-step word problems involving whole numbers between 0 and 1,000
- 7. Selects and uses appropriate techniques to facilitate computation while solving problems and determining the reasonableness of results
 - a. Rounds whole numbers to thousands
 - b. Uses estimation to check the reasonableness of results in solving one-step word problems using whole numbers between 0 and 1,000

Indicator B: Applies data collection, data analysis, and probability to interpret, predict, and/or solve real-life problems

- 1. Constructs, reads, analyzes, and interprets tables, charts, and graphs
 - a. Interprets and analyzes data from pictographs and bar graphs where each symbol represents one unit
 - b. Interprets and analyzes data on a pictograph where each symbol represents multiple units
- 2. Predicts and measures the likelihood of events
 - a.. Describes events that have 100% probability or 0% probability
 - b. Identifies outcomes that are more likely, less likely, or equally likely to occur
 - c. Describes the concept of sample

Indicator C: Applies algebraic concepts and methods to explore, analyze or solve real-life problems

- 1. Creates, describes, and extends a variety of patterns and formulates generalizations to make predictions
 - a. Communicates in written form the description of the pattern in a series of objects
 - b. Communicates in written form a description of the pattern in a sequence of numbers
 - c. Extends simple geometric and number pattern
 - d. Creates simple geometric and number patterns
- 2. Represents and describes mathematical ordering and grouping relationships
 - a. Sorts and classifies objects according to observable attributes
 - b. Finds the missing element in a number sentence involving addition, subtraction, multiplication, and division
 - c. Uses words such as *all, none, some*, and *many* to make reasonable statements
 - d. Describes a rule for a simple pattern

Indicator D: Uses geometric properties, relationships, and methods to identify, analyze and solve real-life problems

- 1. Identifies and describes basic geometric shapes
 - a. Compares and contrasts the characteristics of simple polygons (e.g., triangle, square, rectangle)
 - b.Compares and contrasts the characteristics of simple solid geometric figures (e.g., cube and rectangular container)
 - c. Identifies characteristics of lines which intersect, are parallel, or are perpendicular

Indicator E: Applies knowledge of standard measurements to real-life situations

- 1. Demonstrates that a single object or event can be measured in different ways (e.g., length, mass/weight, time, capacity, temperature, area, volume)
 - a. Identifies the appropriate type of measurement for each attribute of an object or event and justifies answer
- 2. Demonstrates the appropriate measurement with U.S. customary and metric units for an object or event including:
 - a. Length inches, feet and yards, millimeters, centimeters, meters, kilometers
 - b. Capacity cups, gallons, milliliters, liters
 - c. Weight ounces, pounds, tons, grams, kilograms
 - d. Area square unit
 - e. Volume cubic unit
 - f. Time second, minute, hour, day, month, year, decade, century
 - g. Temperature degrees on Fahrenheit scale, degrees on Celsius scale
- 3. Compares units of measurement to determine more or less relationships using U.S. customary and metric units (e.g., 2 cups = 1 pint, 3 cups > 1 pint)
- 4. Makes estimation of measurement
 - a. Using U.S. customary or metric units, estimates a measurement of a given object or event and compares the estimation to actual measurement and justifies the answer
 - b. Evaluates the reasonableness of the estimation and justifies the answer
- 5. Applies measurement
 - a. Solves real-life problems involving measurements using U.S. customary and metric units

ABE III

Indicator A: Develops and applies number sense to solve a variety of real-life problems and to determine if the results are reasonable

- 1. Develops concepts, number sense, and number relationships relating to whole numbers, fractions, decimals, and percents
 - a. Describes a fraction of any quantity as the relationship between the given numerator part(s) related to the entire number of part(s) in the whole denominator
 - b. Describes a decimal as the fractional representation of the quantity expressed as a whole number and/or tenths, hundredths, thousandths, etc.
 - c. Describes percents as a fraction or as parts out of 100
 - d. Reads and writes fractions, decimals, and percents as numerals and number words
 - e. Expresses and reads whole numbers between 1000 and 1,000,000,000 as numerals
 - f. Reads and writes whole numbers between 1000 and 1,000,000,000 as number words
 - g. Writes whole numbers between 1000 and 1,000,000,000 in expanded notation
 - h. Places in correct sequence whole numbers between 1000 and 1,000,000,000
 - i. Places in correct sequence fractions, decimals, and percents in same groups or mixed groups
 - j. Expresses a quantity in equivalent fraction, decimal, and percent form
- 2. Performs the operations of addition, subtraction, multiplication, and division using whole numbers, fractions, decimals, and percents
 - a. Selects and uses correctly the operations of addition, subtraction, multiplication, and division in story problems involving whole numbers
 - b. Selects and uses correctly the operations of addition, subtraction, multiplication, and division in story problems involving fractions and decimals
 - c. Identifies the whole, part, and percent in problems involving percent
 - d. Solves word problems involving averaging of rational whole numbers, fractions, or decimals
 - e. Solves word problems involving the order of operations
- 3. Applies number theory concepts to represent numbers in various ways
 - a. States the prime factors for a given whole number
 - b. Names the square root of a number with a perfect square
 - c. States the multiples of a given number
 - d. Defines prime and composite numbers
 - e. Sorts numbers by their properties
- 4. Selects and uses appropriate techniques and information to facilitate computation while solving problems and determining the reasonableness of results
 - a. Rounds decimals to tenths, hundredths, and thousandths place
 - b. Rounds fractions to nearest whole and/or half
 - c. Uses estimation to check the reasonableness of results using whole numbers, fractions, decimals, and percents in solving problems
 - d. Distinguishes between relevant and irrelevant information
 - e. Recognizes the degree of precision needed

Indicator B: Applies data collection, data analysis, and probability to interpret, predict,

and/or solve real-life problems

- 1. Constructs, reads, analyzes and interprets graphs, tables, and charts
 - a. Interprets and analyzes data from circle and line graphs
 - b. Formulates questions from graphs, tables, and charts
 - c. Solves word problems using graphs, tables, and charts
- 2. Determines probabilities through experiments and/or simulations and compares the results with prediction
 - a. Predicts possible outcomes in an experiment in which the possible number of outcomes changes (e. g., two-step probability)
 - b. Compares the outcome of the experiment to the predictions

Indicator C: Applies algebraic concepts and methods to explore, analyze or solve real-life problems

- 1. Translates and differentiates the language of algebra
 - a. Describes and uses a variable and a constant in a real life situation
 - b. Defines a term, expression, equation and inequality
 - c. Simplifies an expression by combining like terms (e.g., 3x + 2 + 2x + 3 = 5x + 5)
 - d. Translates a written phrase into an expression
 - e. Correctly uses mathematical symbols <, >, =, \neq
- 2. Identifies order of operations
 - a. Uses the correct order of operations in solving algebraic expressions
- 3. Represents and describes how changing the value of one variable in a relationship results in a change in another ("When I am 9, 3 times my age = 27. When I am 10, 3 times my age = 30. In the equation 3x = y, when x = 9, y = 27")

Indicator D: Uses geometric properties, relationships, and methods to identify, analyze and

solve real-life problems

- 1. Identifies, describes and measures basic geometric shapes and angles using definitions and appropriate measuring devices (e.g., protractor, ruler, compass)
 - a. Draws, measures, and classifies angles as right, acute, obtuse, straight, or reflex
 - b. Identifies the properties of geometric figures using definitions of similarity, congruent, and symmetry
 - c. Identifies and describes properties of alternate interior, corresponding, complementary, and supplementary angles
 - d. Classifies triangles by their angles and sides as equilateral, isosceles, scalene, acute, obtuse and right
 - e. Labels and identifies the characteristics of a circle, cylinder, parallelogram, pentagon, hexagon, octagon, decagon, rhombus, and trapezoid (e.g., radius, diameter, base, height)

Indicator E: Applies knowledge of standard measurements to real-life situations

- 1. Estimates and uses U.S. customary and metric measurement to describe and make comparison
 - a. Converts measurement units to equivalent units within a given system
 - b. Compares estimated measurements between U.S. customary and metric systems and Fahrenheit and Celsius systems
- 2. Estimates, uses, and describes measures of distance, perimeter, area, volume, capacity, weight, mass, and angles
 - a. Differentiates between perimeter, area, and volume of polygons and solids using concrete and illustrative modes
 - b. Differentiates between weight and mass
 - c. Differentiates between capacity and volume
 - d. Records estimates and measurements for:

Distance in scale drawings

Circumference

Degrees of angles

- 3. Uses formulas and procedures to solve problems involving measurement
 - a. Uses given formulas to find:

Area and perimeter of simple polygons

Surface area of rectangular containers

Volume of rectangular containers

ASE I/GED

Indicator A: Develops and applies number sense to solve a variety of real-life problems and to determine if the results are reasonable

- 1. Develops concepts, number sense, and number relationships relating to integers and rational numbers (e.g., whole numbers, decimals, fractions)
 - a. Estimates the square root of any whole number to the nearest whole number
 - b. Places integers in correct sequence
 - c. Adds, subtracts, multiplies, and divides positive and negative numbers
- 2. Demonstrates the relationships between the operations of addition, subtraction, multiplication, and division as they relate to integers
 - a. Explains the effect of addition, subtraction, multiplication, and division on positive and negative numbers
- 3. Selects and uses appropriate techniques while solving problems and determining the reasonableness of results
 - a. Represents and uses numbers with exponents
 - b. Uses computation, estimation, and proportions to solve word problems involving scientific notation
 - c. Uses computation, estimation, and proportions to solve word problems involving integers, exponents, and square roots

Indicator B: Applies data collection, data analysis, and probability to interpret, predict, and/or solve real-life problems

- 1. Constructs, reads, analyzes, and interprets tables, charts, and graphs
 - a. Chooses an appropriate graphic format to organize and represent data
 - b. Organizes collections of data into frequency charts, stem-and-leaf plots, scatter plots and matrices
- 2. Makes valid inferences and predictions based on statistical analysis
 - a. Formulates predictions from a given set of data and justifies predictions
 - b. Compares a given prediction with the results
 - c. Differentiates between a sampling and a census
- 3. Uses measures of mean, median, mode and range applied to a data set
 - a. Finds the mean, mode, range, median, and quartile of a data set
 - b. Applies the concepts of mean, mode, and median to draw conclusions about data
- 4. Determines probabilities through experiments and/or simulations and compares the results with prediction
 - a. Expresses probability as a fraction or percent

Indicator C: Applies algebraic concepts and methods to explore, analyze or solve real life problems

- 1. Solves problems with formulas
 - a. Uses formulas on GED Math test (i.e., simple interest, distance, total cost) to solve word problems
- 2. Solves equations using addition, subtraction, multiplication, and division and checks by substituting the solution into the original equation
 - a. Solves a one-step equation and uses substitution to check answer
 - b. Solves a two-step equation and uses substitution to check answer
 - c. Analyzes and solves story problems involving one- and two-step equations
 - d. Solves ratio and proportion problems
 - e. Solves computations of cost, distance, and simple interest word problems
 - f. Determines slope of a line

Indicator D: Uses geometric properties, relationships, and methods to identify, analyze and solve real-life problems

- 1. Demonstrates an ability to recognize, define and apply geometric formulas and characteristics of rectangular coordinate planes, solid figures and linear measurements in solving problems
 - a. Applies the appropriate geometric formula (i.e., area, perimeter, volume, Pythagorean relationship, distance between two points in a plane) from the GED Math test for problem solving
 - b. Solves problems using similarity and proportion
 - c. Solves problems using alternate interior angles
 - d. Defines and graphs ordered pairs on rectangular coordinate plane

Indicator E: Applies knowledge of standard measurements to real-life situations

- 1. Describes and converts complex measurement units
 - a. Converts units of measurement into equivalent units of measurement using proportion (e.g., 3 feet: 1 yard; 18 feet: 6 yards)
 - b. Uses scientific notation to express units of measurement in large scales (e.g., distance of sun from earth = 93,678,912 miles = 93.678912 x 10⁶)
 - c. Uses scientific notation to express units of measurement in small scales using negative exponents
 - d. Demonstrates change of placement in converting measurement units in the metric system (e.g., 353mm = 35.3cm, 2.5km = 25,000cm)

ASE II

Indicator A: Develops and applies number sense to solve a variety of real-life problems and to determine if the results are reasonable

- 1. Develops concepts, number sense, and number relationships relating to integers and rational numbers (e.g., whole numbers, decimals, fractions)
 - a. Explains the meaning of absolute value, e.g., |-8| = 8
 - b. Uses positive and negative exponents
- 2. Selects and uses appropriate techniques while solving problems and determining the reasonableness of results
- 3. Compares and contrasts the real number system and its various subsystems with regard to their structural characteristics
 - a. Classifies numbers as members of the sets (natural, whole, integers, rationals, and irrationals)
 - b. Compares subsets of the real number system with regard to their properties (commutative, associative, distributive, identity, inverse and closure properties)

Indicator B: Applies data collection, data analysis, and probability to interpret, predict, and/or solve real-life problems

- 1. Constructs, reads, analyzes, and interprets tables, charts, and graphs
 - a. Evaluates the reasonableness of conclusions drawn from interpretation of data in a graphic format
- 2. Constructs and draws inferences including measures of central tendency, from charts, tables, graphs and data plots that summarize data from real-world situations
 - a. Organizes collections of data into frequency charts, stem-and-leaf plots, scatter plots and matrices and determines outliers
 - b. Constructs histograms, line graphs, circle graphs and box-and-whisker plots
 - c. Uses mode, quartiles and range as a means for effective decision making in analyzing the data
- 3. Applies curve fitting to make predictions from data
 - a. Draws a line or a curve which closely fits a scatter plot
- 4. Explains the effects of sampling on statistical claims and recognizes misuses of statistics
 - a. Differentiates between a biased and an unbiased sample
 - b. Recognizes the impact of interpreting data from a biased sample
- 5. Determines probabilities through experiments and/or simulations and compares the results

with prediction

- a. Uses simulations to estimate probabilities of real-life situations
- b. Designs a statistical experiment based on a given hypothesis
- 6. Describes, in general terms, the normal curve and uses its properties to answer questions about sets of data that are assumed to be normally distributed
 - a. Determines if data gathered from a real-world situation fit a normal curve
 - b Describes the central tendency characteristics of the normal curve
 - c. Makes simple predictions from data represented on the graph
- 7. Explains the concept of a random variable

- a Distinguishes situations where a random variable is needed or used
- b. Uses a random number table or technology to generate random numbers in modeling real-life situations (e.g., select randomly who belongs in what group)
- 8. Applies measures of central tendency, variability, and correlation
 - a. Draws conclusions about the "spread" of data given the variance and standard deviation (e.g., compare sets of data with the same central tendency but with different variance)
 - b. Determines, from a given plot of data, whether it has strong or weak, positive or negative correlation

Indicator C: Applies algebraic concepts and methods to explore, analyze or solve real life problems

- 1. Models real-world phenomena using functions and relations
 - a. Identifies the independent and dependent variables from a real-life situation
 - b. Expresses the relationship between two variables using a table, equation, graph, and matrix
 - c. Describes the relationship suggested by two or more graphs of related real-world situations
- 2. Interprets algebraic equations and inequalities geometrically and describes geometric relationships algebraically
 - a. Graphs a linear equation in two variables
 - b. Graphs a linear inequality in two variables
 - c. Determines slope and intercepts of a linear equation
 - d. Writes an equation of the line that passes through two given points
 - e. Determines from two linear equations whether the lines are parallel, are perpendicular or coincide
- 3. Applies trigonometry to real-life problem situations (e.g., investigates how to find the distance across the river using similar triangles and trigonometric ratios; compares the sine and cosine curves to the curves of sound waves and tide variations)
 - a. Uses the definitions of trigonometric functions to find the sine, cosine and tangent of the acute angles of a right triangle
 - b. Solves simple right-triangle trigonometric equations involving sine, cosine and tangent
 - c. Uses an appropriate right-triangle trigonometric model to solve a real-life problem
- 4. Performs mathematical operations on expressions and matrices, and solves equations and inequalities
 - a. Simplifies numerical expressions using the order of operations including exponents
 - b. Evaluates algebraic expressions using substitution
 - c. Simplifies square roots and cube roots with monomial radicands that are perfect squares or perfect cubes
 - d. Evaluates numerical and algebraic absolute value expressions
 - e. Multiplies and divides monomial expressions with integer exponents
 - f. Solves linear equations and inequalities in one variable
 - g. Solves quadratic equations
 - h. Solves radical equations involving one radical
 - i. Solves proportions which generate linear or quadratic equations
 - j. Solves absolute value equations containing a single absolute value expression
 - k. Solves systems of linear equations in two variables

- 5. Translates among tabular, symbolic and graphical representations of functions
 - a. Creates a linear equation from a table of values
 - b. Creates a graph from a table of values
 - c. Determines the solution to a system of inequalities in two variables, from a given graph (e.g., "Which of the shaded regions represents the solution to the system?")
 d. Determines the solution to a system of equations in two variables, from a given graph

Indicator D: Uses geometric properties, relationships, and methods to identify, analyze and solve real-life problems

- 1. Interprets and draws three-dimensional objects
 - a. Sketches prisms, pyramids, cones, and spheres
 - b. Classifies prisms, pyramids, cones, cylinders and spheres by base shape, lateral surface shape, related surface area and volume formulas
- 2. Represents problem situations with geometric models and applies properties of figures
 - a. Calculates surface areas and volumes of three-dimensional geometric figures given the required formulas
- 3. Deduces properties of figures using transformations in coordinate systems, identifying congruency and similarity
 - a. Determines whether a figure is symmetric with respect to a line or a point
 - b. Gives the new coordinates of a transformed geometric figure
 - c. Determines the effects of a transformation on linear and area measurements of the original figure
 - d. Sketches the figure that is the result of a given transformation
- 4. Deduces properties of and relationships between figures from given assumptions
 - a. Finds similarities and differences among geometric shapes and designs using a given attribute (e.g., height, area, perimeter, diagonals, angle measurements)
 - b. Identifies arcs, chords, tangents and secants of a circle
 - c. States valid conclusions using informal deductive reasoning
- 5. Translates between synthetic and coordinate representations (e.g., a straight line is
 - represented by the algebraic equation Ax + By = C)

 a. Verifies characteristics of a given geometric figure using coordinate formulas such as distance, mid-point, and slope to confirm parallelism, perpendicularity, and
- Recognizes and analyzes Euclidean transformations (e.g., reflections, rotations, dilations and translations)
 - a. Classifies transformations based on whether they produce congruent or similar noncongruent figures
 - b. Determines whether a given pair of figures on a coordinate plane represents a translation, reflection, rotation and/or dilation
 - Applies transformational principles to practical situations (e.g., enlarge a photograph)

- 1. Uses inductive and deductive logic to construct simple valid arguments
 - a. Constructs a simple informal deductive proof (e.g., write a proof of the statement: "You can fly from Bombay to Mexico City, given an airline schedule")
 - b. Produces a valid conjecture using inductive reasoning by generalizing from a pattern of observations (e.g., if 10' = 10, 10'= 100, 10'= 1000, make a conjecture)
- 2. Determines the validity of arguments
 - a. Determines if the converse of a given statement is true or false
 - b. Draws a simple valid conclusion from a given if ... then statement and a minor premise
 - c Lists related if....then statements in logical order
 - d. Distinguishes valid arguments from invalid arguments
 - e. Analyzes assertions about everyday life by using principles of logic (e.g., examine the fallacies of advertising)
 - f.. Uses Venn diagrams to determine the validity of an argument
 - g. Recognizes the difference between a statement verified by mathematical proof (i.e., a theorem) and one verified by empirical data (e.g., women score higher than men on vocabulary tests)
- 3. Formulates counterexamples and uses indirect proof
- 4. Develops and analyzes algorithms
 - a. Constructs a counterexample to show that a given invalid conjecture is false (e.g., Nina makes a conjecture that x' > x' for all values of x. Find a counterexample.)
 - b. Writes an algorithm that explains a particular mathematical process (e.g., tell a younger child how to find the average of two numbers)
 - c. Determines the purpose of a given algorithm
 - d. Determines whether given algorithms are equivalent

Math Performance Standards

Definition of terms

Familiar situation: Context in which the performance of a skill is assessed under routine

circumstances similar to those in which instruction has taken

place

Unfamiliar situation: Context in which the performance of a skill is assessed under non-routine circumstances which:

- are not necessarily similar to those in which instruction has taken place (e.g., different vocabulary, reordering of information)
- necessitate application of the skill to a real life situation
- necessitate the use of analytic reasoning skills to distinguish relevant and non-relevant information and/or situations where there is not enough information to solve the problem.

<u>Note</u>: In all areas of the Math Performance Standards, it is recommended that students be involved in:

- Problem solving opportunities based on the students' experiences at home, at work, and in the community
- Estimating answers to problems
- Checking answers for reasonableness
- Looking for alternative solution strategies

Pre-Literacy

Beginning

At this level, the student performs the following tasks with a rudimentary understanding of the concepts and basic reasoning skills. The student's explanations are minimal and presented without a lot of supporting information.

Sometimes in familiar, routine situations, the student:

Number Sense:

- reads and writes numerals between 0 and 20
- recognizes American currency symbols (e.g., \$ and $\not\in$)
- performs the operations of addition and subtraction of one digit numbers

Data Analysis:

• collects, records, and organizes data from a simple survey of at least five respondents

Algebra:

- replicates a three-item single-attribute pattern, (e.g., red square, blue square, yellow square, red square...)
- determines the next number in a given sequence of numbers up to 20

Geometry:

• names simple polygons using the student's own vocabulary

Measurement:

• selects the appropriate device for measuring an object

Approaching

At this level, the student performs the following tasks with a basic understanding of the concepts and reasoning skills; however, explanations about how and why problems were solved are minimal.

Often in familiar, routine situations and sometimes in unfamiliar, non-routine situations, the student:

Number Sense:

- recognizes relationships among real life representations, number names, and symbolic representation of numbers between 0 and 50
- performs the operations of addition and subtraction of one digit numbers
- identifies coins and currency using pennies, nickels, dimes, quarters, half-dollars, and dollar bills

Data Analysis:

- in a simple survey of at least five respondents:
 - collects and records data accurately
 - organizes data according to choice
 - identifies choices receiving largest and smallest number of responses
 - constructs a display of data indicating responses

Algebra:

- replicates a five item one attribute pattern (e.g., red square, blue square, yellow square, green square, purple square, red square....)
- determines the next number in a given sequence of numbers up to 50

Geometry:

• names simple polygons and solid geometric forms using the student's own vocabulary

Measurement:

• selects the appropriate device for measuring an object or event using United States customary units

Met

At this level, the student demonstrates some conceptual understanding while performing the following tasks. The student provides organized solutions complete with supporting information and explanations about how they were achieved.

Most of the time in both familiar and unfamiliar, non-routine situations, the student:

Number Sense:

- writes, reads, and places in correct sequence whole numbers between 0 and 100
- performs the operations of addition and subtraction of one digit numbers
- recognizes symbols for coins and currency
- identifies American currency up to and including dollar bills

Data Analysis:

- in a simple survey of at least five respondents:
 - collects and records data accurately
 - organizes data according to choice
 - identifies choices receiving largest and smallest number of responses
 - constructs a data display indicating responses

Algebra:

- replicates a five-item two-attribute pattern (e.g., large red square, small blue square, large yellow square, small red, large red square....)
- determines the next number in a given sequence of numbers up to 100

Geometry:

 identifies characteristics of simple polygons and solid geometric forms using the student's own vocabulary

Measurement:

• selects the appropriate device for measuring an object or event using U.S. customary units

Exceeds

- consistently performs all the above tasks by applying both procedural knowledge and conceptual understanding to both familiar, routine and unfamiliar, non-routine situations
- provides solutions that are clear, logical, and go beyond the obvious in the interpretations
- justifies solutions by explaining how, as well as why, the answer was achieved

ABE I

Beginning

At this level, the student performs the following tasks with a rudimentary understanding of the concepts and basic reasoning skills. The student's explanations are minimal and presented without much supporting information.

Sometimes in familiar situations the student:

Number Sense:

- adds and subtracts whole numbers, without regrouping, up to 100
- expresses equal relationships of coins using dimes, nickels, and pennies up to \$.50

Data Analysis:

- reads and interprets most pictographs
- describes many events that have a probability of 100% or 0%

Algebra:

• creates three-item, single-attribute patterns and at times, is able to explain the logic of the sequence

Geometry:

• identifies a few attributes of simple polygons.

Measurement:

• describes how the attributes of some objects and events can be measured using different units of measurement

Approaching

At this level, the student performs the following tasks with some understanding of the concepts. The student is able to employ problem-solving strategies such as identifying and using appropriate information. Although reasoning skills are evident and supporting information is present, explanations are not always complete.

Often in familiar, routine situations and sometimes in unfamiliar, non-routine situations, the student:

Number Sense:

- places numbers between 0 and 1000 on a number line
- expresses, reads, and writes whole numbers between 0 and 1000 as numerals and number words
- matches a fraction and number word to a pictorial representation of halves, thirds, and fourths
- adds and subtracts whole numbers up to 500 with regrouping
- distinguishes between odd and even numbers
- explains place value up to the tenth's
- counts specific amounts of money using coins and bills up to \$1.00

Data Analysis:

- collects and records data
- reads and interprets bar graphs
- identifies outcomes that are likely to occur in one-step probability experiments

Algebra:

- creates a five-item, single-attribute pattern and explains the logic of the sequence
- skip counts by 2's, 5's, and 10's up to 20
- finds the missing element in a number sentence involving addition and subtraction

Geometry:

• identifies the characteristics of simple polygons (i.e., side, leg, angle, right angle)

Measurement:

• chooses the appropriate tool and unit to measure an object or event

Met

At this level, the student makes sound decisions about how to set up a problem and performs the following tasks by applying both procedural knowledge and conceptual understanding. The student explains the reasoning used and justifies the procedures selected with concrete objects and pictorial representations. The student notes connections between one problem and another.

Most of the time in both familiar, routine and unfamiliar, non-routine situations, the student:

Number Sense:

- adds and subtracts whole numbers up to 500
- multiplies and divides single digit numbers
- distinguishes between odd and even numbers
- identifies and describes models of common fractions
- makes a model to represent a fractional representation of halves, thirds, and fourths
- expresses whole numbers between 0 and 1000 in expanded notation

- selects appropriate operations to solve single-step word problems involving whole numbers between 0 and 500 for addition and subtraction and single digits for multiplication and division
- rounds whole numbers to the hundredths
- uses estimation to check the reasonableness of results in solving single step word problems
- expresses equal relationships of coins and currency up to \$5.00
- demonstrates the meaning of addition and subtraction

Data Analysis:

- collects, records, and organizes data
- constructs, reads, analyzes, and interprets pictographs, circle graphs and bar graphs
- predicts the likelihood of events in any one-step probability experiment and compares the outcome of an experiment to the predictions

Algebra:

- creates, extends, and describes the logic of a variety of patterns
- skip counts up to 100 by 2's, 5's, and 10's

Geometry:

- identifies the characteristics of simple polygons
- identifies the characteristics of simple solid geometric figures

Measurement:

- makes reasonable estimates and measures various attributes of objects and events with appropriate tools and measuring units
- solves real life problems involving measurements using U.S. customary units
- identifies the appropriate measurement of an object or event with U.S. customary units (length, capacity, weight, area, volume, time, and temperature)

Exceeds

- consistently performs all the above tasks in both familiar, routine and unfamiliar, non-routine situations
- identifies relationships, discriminate relevant from irrelevant information, sequences, prioritizes, and observes patterns
- shows mathematical reasoning in solutions in a variety of ways, including words, numbers, symbols, pictures, charts, graphs, tables, diagrams and models
- expresses solutions clearly and logically using appropriate mathematical notation and terms and clear language, and supports solutions with evidence, in both oral and written work

ABE II

Beginning

At this level, the student performs the following tasks with basic understanding of the concepts and limited reasoning skills. The student's explanations are often minimal and presented without much supporting information.

Sometimes in familiar, routine situations the student:

Number Sense:

- adds and subtracts whole numbers up to 500
- multiplies and divides double digit numbers
- expresses equal relationships of coins using dimes, nickels, and pennies up to \$5.00
- places numbers between 0 and 10,000 on a number line
- expresses, reads and writes whole numbers between 0 and 10,000 as numerals and numbers
- identifies models of mixed numbers
- uses estimation to check the reasonableness of results and rounds whole numbers to hundredths

Data Analysis:

- describes events that have a probability of 100% or 0%
- collects, records, and organizes data
- constructs, reads, analyzes, and interprets pictographs, circle graphs and bar graphs

Algebra:

- finds the missing element in some number sentences involving addition, subtraction, and multiplication
- sorts and classifies objects according to many observable attributes
- creates a five-item, single-attribute pattern and explains the logic of the sequence
- skip counts by 2's, 5's, and 10's

Geometry:

- contrasts some of the attributes of simple polygons
- contrasts some of the attributes of simple solid geometric figures

Measurement:

 describes how the attributes of objects and events can be measured using different units of measurement

Approaching

At this level, the student performs the following tasks with some understanding of the concepts. The student is able to employ problem-solving strategies such as identifying and using appropriate information. Although reasoning skills are evident and supporting information is present, explanations are not always complete.

Often in familiar, routine situations and sometimes in unfamiliar, non-routine situations, the student:

Number Sense:

- places numbers between 0 and 10,000 on a number line
- adds, subtracts, and multiplies whole numbers up to 1000 with regrouping
- explains place value up to the thousand's place
- counts specific amounts of money using any coin or bill
- describes mixed numbers as parts of a whole
- expresses, reads and writes whole numbers between 0 and 10,000 as numerals and numbers
- identifies models of mixed numbers
- uses estimation to check the reasonableness of results and rounds whole numbers to thousandths

Data Analysis:

- organizes the data and constructs and reads pictographs, circle graphs and bar graphs
- identifies outcomes that are more likely or less likely to occur in one-step probability experiment
- describes events that have 100% or 0% probability

Algebra:

- finds the missing element in a number sentence involving addition, subtraction, multiplication, and division
- sorts and classifies objects according to many observable attributes
- extends and describes in writing the logic of a variety of geometric and numeric patterns
- uses words such as *all and none* to make reasonable statements about the probability of events

Geometry:

- contrasts many of the characteristics of simple polygons (i.e., side, leg, angle, right angle)
- contrasts many of the characteristics of simple solid geometric figures (i.e., edge, face),

Measurement:

- measures various attributes of objects and events with appropriate tools and customary and metric measuring units
- using U.S. customary or metric units, estimates a measurement of a given object or event and compares the estimation to actual measurement and justifies the reasonableness of the answer

Met

At this level, the student makes sound decisions about how to set up a problem and performs the following tasks by applying both procedural knowledge and conceptual understanding. The student explains the reasoning used and justifies the procedures selected with concrete objects and pictorial representations. The student notes connections between one problem and another.

Most of the time in both familiar, routine and unfamiliar, non-routine situations, the student:

Number Sense:

- performs operations, estimates, and recognizes relationships with whole numbers up to 10,000
- expresses, reads and writes whole numbers between 0 and 10,000 as numerals and numbers
- expresses whole numbers between 0 and 10,000 in expanded notation
- identifies models of mixed numbers
- matches mixed numbers to pictorial representations and makes a model to represent a fractional representation of mixed numbers
- expresses equal relationships of coins and currency using pennies, nickels, dimes, quarters, half-dollars, and bills up to \$100.00
- explains the meaning of multiplication and division and use one operation to check the answers of the other
- adds, subtracts, multiplies, and divides whole numbers between 0 and 1,000 correctly
- selects appropriate operation to solve one-step word problems involving whole numbers between 0 and 1.000
- uses estimation to check the reasonableness of results and rounds whole numbers to thousandths

Data Analysis:

- organizes the data and constructs, reads, analyzes, and interprets pictographs, circle graphs and bar graphs representing one unit and multiple units
- describes events that have 100% or 0% probability
- identifies outcomes that are more likely, less likely, or equally likely to occur
- describes the concept of sample

Algebra:

- sorts and classifies objects according to observable attributes
- creates, extends, and describes in writing the logic of a variety of geometric and numeric patterns
- uses words such as *all, none, some,* and *many* to make reasonable statements about the probability of events
- describes a rule for a simple pattern

Geometry:

- contrasts the characteristics of simple polygons
- contrasts the characteristics of simple, solid geometric figures
- identifies the characteristics of intersecting, parallel, and perpendicular lines

Measurement:

- measures various attributes of objects and events with appropriate tools and customary and metric measuring units
- solves real life problems involving measurements using U.S. customary and metric units
- using U.S. customary or metric units, estimates a measurement of a given object or event and compares the estimation to actual measurement and justifies and judges the reasonableness of the answer
- compares units of measurement to determine more or less relationships using U.S. customary and metric units (e.g., 2 cups = 1 pint, 3 cups > 1 pint)

Exceeds

- consistently performs all the above tasks in both familiar, routine and unfamiliar, non-routine situations
- analyzes problems by identifying relationships, discriminating relevant from irrelevant information, sequencing and prioritizing, and observing patterns
- applies strategies and results from simpler problems to more complex situations
- shows mathematical reasoning in solutions in a variety of ways, including words, numbers, symbols, pictures, charts, graphs, tables, diagrams and models
- expresses the solution clearly and logically using appropriate mathematical notation and terms and clear language, and supports solutions with evidence, in both oral and written work
- indicates the relative advantages of exact and approximate solutions to problems and gives answers to a specified degree of accuracy

ABE III

Beginning

At this level, the student exhibits some evidence of conceptual and procedural understanding of the following tasks in routine situations. Generally, the student is able to determine which of the available data are necessary and sufficient for correct solutions although the student shows limited skill in communicating mathematically.

Sometimes in familiar, routine situations, the student:

Number Sense:

- performs operations on whole numbers up to 10,000 and decimals to the tenths place
- solves one-operation word problems containing some irrelevant information
- expresses a quantity as an equivalent fraction, decimal, and percent
- reads and writes fractions, decimals, and percents as numerals and number words
- reads and writes numerals between 1000 and 1,000,000,000
- reads and writes whole numbers between 1000 and 1,000,000,000 as number words
- writes whole numbers between 1000 and 1,000,000,000 in expanded notation
- places numbers between 1000 and 1,000,000,000 in correct sequence

Data Analysis:

• reads and interprets a chart

Algebra:

- when given word problems using one variable and a constant, identifies the variable and the constant
- translates the word problem into a one-operation expression using correct mathematical symbolism (e.g., <, >, ≠, =)

Geometry:

- using the student's vocabulary, identifies and draws an angle
- using the student's own vocabulary, identifies the attributes of:
 - similarity, congruence, and symmetry in geometric figures
 - alternate interior, corresponding, complementary, and supplementary angles
 - equilateral, acute, and obtuse triangles
 - circle, cylinder, parallelogram and pentagon

Measurement:

• converts common U.S. linear and time measurements into equivalent measurements

Approaching

This level of performance signifies an understanding of arithmetic operations and some ability to use fundamental algebraic and informal geometric concepts in problem solving. The student is able to solve problems through the appropriate selection and use of strategies and tools and by distinguishing between relevant and irrelevant information. The student recognizes the degree of precision needed in the answer. Written solutions are organized and presented with some supporting information.

Often in familiar, routine situations and sometimes in unfamiliar, non-routine situations, the student:

Number Sense:

- describes a fraction of any quantity as the relationship between the given numerator part(s) related to the entire number of part(s) in the whole denominator
- describes a decimal as the fractional representation of the quantity expressed as a whole number and/or tenths, hundredths, thousandths, etc.
- describes percents as a fraction or as parts out of 100
- performs operations on whole numbers up to 100,000, decimals to the hundredths place, and any simple fraction
- rounds any whole number to specified equivalent, any decimal to nearest hundredth, and any fraction to nearest half or whole
- solves two-operation word problems containing whole numbers up to 100,000, decimals up to hundredths, and any simple fraction
- identifies the whole, part, and percent in problems involving percents
- solves word problems involving averaging of whole numbers up to 100,000, decimals up to the hundredths place, and any simple fraction
- places in correct sequence fractions, decimals, and percents in same groups or mixed groups
- selects and uses correctly the operations of addition, subtraction, multiplication, and division in story problems involving whole numbers, fractions and decimals
- defines prime and composite numbers

Data Analysis:

• constructs, reads, and interprets a table and a line graph

Algebra:

- when given word problems with one variable and a constant, translates the facts of the situation into algebraic terms
- simplifies an expression by combining like terms
- solves a one-operation algebraic equation requiring addition and subtraction

Geometry:

- describes with appropriate vocabulary, draws, and accurately measures right, acute, obtuse, straight, and reflex angles
- using appropriate vocabulary, describes the attributes of:
 - similarity, congruence, and symmetry in geometric figures
 - alternate interior, corresponding, complementary, and supplementary angles
 - equilateral, acute, obtuse, isosceles, and scalene triangles
 - a circle, cylinder, parallelogram, pentagon, hexagon, octagon, decagon, rhombus, and trapezoid

Measurement:

- converts measurement units to equivalent units within a given system
- solves problems involving the perimeter of objects
- using own vocabulary, differentiates between perimeter, area, and volume
- differentiates between weight and mass
- differentiates between capacity and volume
- estimates and records measurements for circumference, angles, and distance in scale drawings

Met

At this level, the student has a thorough understanding of the concepts – an understanding sufficient for problem solving in practical situations. The student is able to convey underlying reasoning skills beyond the level of arithmetic operations to fundamental algebraic and geometric concepts in problem solving. The student is able to compare and contrast mathematical ideas and generate examples, distinguish between relevant and irrelevant information; sequence, prioritize, and observe patterns; and recognize the degree of precision needed in the answer. Written solutions are organized and presented both with supporting information and explanations of how they were achieved.

Most of the time in both familiar, routine and unfamiliar, non-routine situations, the student:

Number Sense:

- performs operations on whole numbers up to 1,000,000,000, decimals to the thousandths place, any simple fraction or mixed number, and percents
- represents any rational number as a numeral, number word, or expanded notation
- expresses a quantity as an equivalent fraction, decimal, and percent
- places in correct sequence whole numbers up to 1,000,000,000
- places in correct sequence fractions, decimals, and percents in same groups or mixed groups
- solves multiple-operation word problems involving whole numbers, fractions, decimals,
- identifies the whole, part, and percent in problems involving percents
- solves word problems involving averaging of whole numbers, fractions, or decimals
- solves word problems involving the order of operations
- places in correct sequence fractions, decimals, and percents in same groups or mixed groups

- selects and uses correctly the operations of addition, subtraction, multiplication, and division in story problems involving whole numbers, fractions and decimals
- defines prime and composite numbers
- identifies and defines multiples, factors, and square roots of numbers using own vocabulary
- sorts and defines numbers by their properties

Data Analysis:

- constructs, reads, analyzes, interprets, and solves word problems using tables, charts, circle graphs, and line graphs
- formulates questions from graphs, tables, and charts
- predicts outcomes in a two-step probability experiment and compares the outcomes to the predictions

Algebra:

- when given a word problem with one variable and a constant, translates the facts of the situation into algebraic terms
- constructs and solves a one-operation equation requiring addition, subtraction, multiplication, or division
- describes and uses a variable and a constant in a real life situation
- represents and describes how changing the value of one variable in a relationship results in a change in another
- uses correct order of operations in solving algebraic equations
- solves simple ratio and proportion problems
- translates word problems into algebraic terms
- defines a term, expression, equation, and inequality
- simplifies an expression by combining like terms
- uses mathematical symbols (e.g., <, >, \neq , =)

Geometry:

- draws, classifies, and measures right, acute, obtuse, straight, and reflex angles
- using appropriate vocabulary, identifies and describes the attributes of:
 - similarity, congruence, and symmetry in geometric figures
 - alternate interior, corresponding, complementary, and supplementary angles
 - equilateral, acute, obtuse, isosceles, and scalene triangles
 - a circle, cylinder, parallelogram, pentagon, hexagon, octagon, decagon, rhombus, and trapezoid

Measurement:

- solves problems involving the perimeter of any polygon
- differentiates between perimeter, area, and volume of any object
- uses formulas to find:
 - area of simple polygon
 - surface area of rectangular containers
 - volume of rectangular containers
- converts measurement units to equivalent units within a given system

- compares estimated measurements between U.S. customary and metric systems
- compares estimated measurements between Fahrenheit and Celsius systems
- differentiates between weight and mass
- differentiates between capacity and volume
- estimates and records measurements for circumference, angles, and distance in scale drawings

Exceeds

- applies mathematical concepts and procedures consistently to solve complex problems in the various strands as noted above
- provides solutions that are clear, logical, and go beyond the obvious in their interpretations to identify significant connections
- moves beyond a particular problem by probing examples and counterexamples, making general conclusions, summary statements and posing new, related questions and comments
- creates unique problem-solving techniques and explains the reasoning process underlying the conclusions
- analyzes problems by identifying relationships, discriminating relevant from irrelevant information, sequencing and prioritizing, and observing patterns
- shows mathematical reasoning in solutions in a variety of ways, including words, numbers, symbols, pictures, charts, graphs, tables, diagrams and models
- expresses the solution clearly and logically using appropriate mathematical notation and terms and clear language, and supports solutions with evidence, in both oral and written work
- indicates the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy

ASE I/GED

Beginning

At this level, the student exhibits some evidence of conceptual and procedural understanding when solving problems and performing the tasks below. The student is able to determine which of the available data are necessary and sufficient for correct solutions and use them in problem solving; however, the student's skill in communicating mathematically about these concepts is limited.

Sometimes in familiar, routine situations, the student:

Number Sense:

- explains the concept of positive and negative numbers
- sets up a ratio/proportion problem

Data Analysis:

- organizes and represents data
- formulates predictions based on a data set
- expresses probability as a simple fraction or percent

Algebra:

- recognizes whether positive or negative numbers are to be used in creating algebraic expressions
- solves word problems involving computation of cost, distance, and simple interest

Geometry:

- applies the appropriate geometric formula from the GED Math test
- uses similarity and proportionality for problem solving
- locates an ordered pair of positive numbers on a rectangular coordinate plane

Measurement:

- converts units of measurement into equivalent units of measurement using proportion
- converts units of measurement into equivalent units in the metric system by the movement of the decimal point one place value in either direction (e.g., 45 mm = 4.5 cm, or 4.5 m = 450 cm)

Approaching

The student is able to apply reasoning and generalize from some patterns and examples in the areas of algebra, geometry, and statistics. The student is able to use correct mathematical language and symbols to communicate many mathematical relationships and reasoning processes. Written solutions are organized and presented with some supporting information.

Often in familiar, routine situations and sometimes in unfamiliar, non-routine situations, the student:

Number Sense:

- uses computation and estimation to solve word problems involving integers, exponents, square roots, and scientific notation
- places positive and negative numbers on a number line
- adds, subtracts, multiplies, and divides positive and negative numbers
- estimates the square root of any whole number to the nearest whole number

Data Analysis:

- organizes and represents a given data set graphically
- formulates predictions based on a given data set
- finds the mean, median, and mode of a data set
- expresses probability as a fraction or percent

Algebra:

- solves computations of cost, distance, and simple interest word problems
- determines slope of a line
- when given word problems, solves algebraic equations
- solves multi-operational equations

Geometry:

- applies the appropriate geometric formula (i.e., area, perimeter, volume, Pythagorean relationship, distance between two points in a plane) from the GED Math test
- uses similarity and proportionality for problem solving
- defines and graphs ordered pairs of positive numbers on a rectangular coordinate plane

Measurement:

- converts units of measurement into equivalent units of measurement using proportion
- converts units of measurement into equivalent units in the metric system by the movement of the decimal point in either direction any number of place values
- uses scientific notation to express whole numbers and fractions

Met

At this level, the student has a thorough understanding of the concepts listed below – an understanding sufficient for problem solving in practical situations. The student is able to apply reasoning and generalize from some patterns and examples as well as integrate mathematical concepts and procedures in the areas of algebra, geometry, and statistics. The student is able to judge and defend the reasonableness of answers, make conjectures, defend ideas, and give supporting examples. The student is able to compare and contrast mathematical ideas and generate examples; distinguish between relevant and irrelevant information; sequence, prioritize, and observe patterns; and recognize the degree of precision needed in the answer. Written solutions are organized and presented both with supporting information and explanations of how they were achieved.

Most of the time in both familiar, routine and unfamiliar, non-routine situations, the student:

Number Sense:

- uses computation, estimation, and/or proportions to solve word problems involving integers, rational numbers, exponents, square roots, and scientific notation
- estimates the square root of any whole number to the nearest whole number
- places integers in correct sequence
- adds, subtracts, multiplies, and divides positive and negative numbers and explains the effect
- represents and uses numbers with exponents

Data Analysis:

- expresses probability as a fraction or percent
- finds the mean, median, mode, quartile, and range of a data set
- chooses an appropriate graphic format to organize and represent data
- makes valid inferences and evaluates the reasonableness of conclusions drawn from data
- formulates and justifies predictions from a given set of data
- differentiates between a sampling and a census
- uses simulations to determine probabilities of real-world situations

Algebra:

- when given word problems, solves multi-operation equations
- solves algebraic equations using substitutions
- sets up and solves ratio and proportion problems
- solves computations of cost, distance, and simple interest word problems
- determines slope of a line

Geometry:

- recognizes, defines, applies the appropriate geometric formula (i.e., area, perimeter, volume, Pythagorean relationship, distance between two points in a plane) from the GED Math test
- uses similarity, proportionality, and alternate interior angles for problem solving
- defines and graphs any ordered pair on a rectangular coordinate plane

Measurement:

- using proportion method, converts units of measurement into equivalent units of measurement
- converts units of measurement to equivalent units of measurement in the metric system
- uses scientific notation to express whole numbers, fractions, and units of measurement

Exceeds

- applies mathematical concepts and procedures consistently to solve complex problems in the various strands
- applies strategies and results from simpler problems to more complex situations and integrates concepts and techniques from different areas of mathematics to solve problems
- express the solution clearly and logically using appropriate mathematical notation and terms and clear language, and supports solutions with evidence, in both oral and written work
- formulate generalizations of the results obtained and extends them to other areas of mathematics and other circumstances, including expressing the solution as a general rule
- creates models through probing examples and counterexamples
- communicate mathematical reasoning through the clear, concise, and correct use of mathematical symbolism and logical thinking
- explain the logic inherent in a solution process, by making generalizations and showing that they are valid, and by revealing mathematical patterns inherent in a situation

ASE II

Beginning

At this level, the student exhibits some evidence of conceptual and procedural understanding when solving problems and performing the tasks below. The student is able to determine which of the available data are necessary and sufficient for correct solutions and use them in problem solving; however, the student's skill in communicating mathematically about these concepts is limited.

Sometimes in familiar, routine situations, the student:

Number Sense

- Explains the meaning of absolute value
- Uses positive and negative exponents

Data Analysis

- Evaluates the reasonableness of conclusions drawn from interpretation of data in a graphic format
- Constructs histograms, line graphs, circle graphs and box-and-whisker plots
- Uses mode, quartiles and range as a means for effective decision making in analyzing the data
- Explains the effects of sampling on statistical claims and recognizes misuses of statistics
- Determines probabilities through experiments and/or simulations and compares the results with predictions

Algebra

- Identifies the independent and dependent variables from a real-life situation
- Expresses the relationship between two variables using a table, equation, graph, and matrix and describes the relationship suggested by two or more graphs
- Creates a graph from a table of values
- Writes an equation of the line that passes through two given points
- Evaluates algebraic expressions using substitution
- Multiplies and divides monomial expressions with integer exponents
- Solves linear equation and inequalities in one variable

Geometry

- Sketches prisms, pyramids, cones, and spheres
- Calculates surface areas and volumes of three- dimensional geometric figures given the required formulas
- Identifies arcs, chords, tangents and secants of a circle
- Classifies transformations based on whether they produce congruent or similar noncongruent figures
- Determines whether a given pair of figures on a coordinate plane represents a translation, reflection, rotation and/or dilation

Approaching

At this level, the student demonstrates some procedural and conceptual knowledge in solving problems in the following areas. The student is able to apply reasoning and generalize from some patterns and examples in the areas of algebra, geometry, and statistics. The student is able to use the correct mathematical language and symbols to communicate many mathematical relationships and reasoning processes.

Often in familiar, routine situations and sometimes in unfamiliar, non-routine situations, the student:

Number Sense

- Explains the meaning of absolute value
- Uses positive and negative exponents
- Compares and contrasts the real number system and its various subsystems with regard to their structural characteristics

Data Analysis

- Evaluates the reasonableness of conclusions drawn from interpretation of data in a graphic format
- Constructs histograms, line graphs, circle graphs and box-and-whisker plots
- Uses mode, quartiles and range as a means for effective decision making in analyzing the
- Explains the effects of sampling on statistical claims and recognizes misuses of statistics
- Determines probabilities through experiments and/or simulations and compares the results with predictions
- Determines, from a given plot of data, whether it has strong or weak, positive or negative correlation

Algebra

- Identifies the independent and dependent variables from a real-life situation
- Expresses the relationship between two variables using a table, equation, graph, and matrix and describes the relationship suggested by two or more graphs
- Creates a graph from a table of values
- Writes an equation of the line that passes through two given points
- Determines from two linear equations whether the lines are parallel, are perpendicular or coincide
- Uses the definitions of trigonometric functions to find the sine, cosine and tangent of the acute angles of a right triangle
- Evaluates algebraic expressions using substitution
- Multiplies and divides monomial expressions with integer exponents
- Solves linear equation and inequalities in one variable, and systems of linear equations in two variables

Geometry

- Sketches prisms, pyramids, cones, and spheres
- Calculates surface areas and volumes of three- dimensional geometric figures given the required formulas
- Identifies arcs, chords, tangents and secants of a circle Verifies characteristics of a given geometric figure using coordinate formulas such as distance, mid-point, and slope to confirm parallelism, perpendicularity, and congruency
- Classifies transformations based on whether they produce congruent or similar noncongruent figures
- Determines whether a given pair of figures on a coordinate plane represents a translation, reflection, rotation and/or dilation

Logic & Reasoning

- Determines the validity of arguments
- Draws a simple valid conclusion from a given if ... then statement and a minor premise and places the statements in logical order
- Uses Venn diagrams to determine the validity of an argument
- Recognizes the difference between a statement verified by mathematical proof (i.e., a theorem) and one verified by empirical data

Met

At this level, the student has a thorough understanding of the concepts listed below – an understanding sufficient for problem solving in practical situations. The student is able to apply reasoning and generalize from some patterns and examples as well as integrate mathematical concepts and procedures in the areas of algebra, geometry, and statistics. The student is able to judge and defend the reasonableness of answers, make conjectures, defend ideas, and give supporting examples. The student is able to analyze problems by identifying relationships, discriminating relevant from irrelevant information, identifying missing information, sequencing and prioritizing information, and observing patterns. Written solutions are organized and presented both with supporting information and explanations of how they were achieved.

Most of the time in both familiar, routine and unfamiliar, non-routine situations, the student:

Number Sense

- Explains the meaning of absolute value
- Uses positive and negative exponents
- Compares and contrasts the real number system and its various subsystems with regard to their structural characteristics

Data Analysis

- Evaluates the reasonableness of conclusions drawn from interpretation of data in a graphic
- Organizes collections of data into frequency charts, stem-and-leaf plots, scatter plots and matrices and determine outliers

- Applies curve fitting to make predictions from data
- Explains the effects of sampling on statistical claims and recognizes misuses of statistics
- Determines probabilities through experiments and/or simulations and compares the results with predictions
- Designs a statistical experiment based on a given hypothesis
- Describes, in general terms, the normal curve and uses its properties to answer questions about sets of data that are assumed to be normally distributed
- Explains and uses the concept of a random variable
- Draws conclusions about the "spread" of data given the variance and standard deviation

Algebra

- Expresses the relationship between two variables using a table, equation, graph, and matrix and describes the relationship suggested by two or more graphs
- Creates a linear equation from a table of values and graphs a linear equation and linear inequality in two variables
- Determines slope and intercepts of a linear equation
- Writes an equation of the line that passes through two given points
- Determines from two linear equations whether the lines are parallel, are perpendicular or coincide
- Solves simple right-triangle trigonometric equations involving sine, cosine and tangent and uses an appropriate right-triangle trigonometric model to solve a real-life problem
- Simplifies numerical expressions using the order of operations including exponents
- Simplifies square roots and cube roots with monomial radicands that are perfect squares or perfect cubes
- Evaluates numerical and algebraic absolute value expressions and algebraic expressions using substitution
- Multiplies and divides monomial expressions with integer exponents
- Solves linear equation and inequalities in one variable and two variables, quadratic equations, radical equations involving one radical, absolute value equations, systems of linear equations in two variables
- Solves proportions which generate linear or quadratic equations

Geometry

- Sketches prisms, pyramids, cones, cylinders and spheres and classifies them by base shape, lateral surface shape, related surface area and volume formulas
- Calculates surface areas and volumes of three-dimensional geometric figures given the required formulas
- Deduces properties of, comparisons of, and relationships between geometric figures from given assumptions using informal deductive reasoning
- Identifies arcs, chords, tangents and secants of a circle
- Translates between synthetic and coordinate representations (e.g., a straight line is
- represented by the algebraic equation Ax + By = C) Verifies characteristics of a given geometric figure using coordinate formulas such as distance, mid-point, and slope to confirm parallelism, perpendicularity, and congruency
- Applies transformational principles to practical situations (e.g., enlarge a photograph) and gives the new coordinates of a transformed geometric figure

- Deduces properties of figures using transformations in coordinate systems, identifying congruency and similarity
- Determines the effects of a transformation on linear and area measurements of the original figure and sketches the figure that is the result of a given transformation

Logic & Reasoning

- Uses inductive and deductive logic to construct simple valid arguments
- Determines the validity of arguments and if the converse of a given statement is true or false
- Draws a simple valid conclusion from a given if ... then statement and a minor premise and places the statements in logical order
- Analyzes assertions about everyday life by using principles of logic
- Uses Venn diagrams to determine the validity of an argument
- Recognizes the difference between a statement verified by mathematical proof (i.e., a theorem) and one verified by empirical data
- Formulates counterexamples and uses indirect proof to show that a given invalid conjecture is false
- Determines the purpose of and writes an algorithm that explains a particular mathematical process

Exceeds

- applies mathematical concepts and procedures consistently to solve complex problems in the various strands
- applies strategies and results from simpler problems to more complex situations and integrates concepts and techniques from different areas of mathematics to solve problems
- expresses the solution clearly and logically using appropriate mathematical notation and terms and clear language, and supports solutions with evidence, in both oral and written work
- formulates generalizations of the results obtained and extends them to other areas of mathematics and other circumstances, including expressing the solution as a general rule
- creates models through probing examples and counterexamples
- communicates mathematical reasoning through the clear, concise, and correct use of mathematical symbolism and logical thinking
- explains the logic inherent in a solution process, by making generalizations and showing that they are valid, and by revealing mathematical patterns inherent in a situation
- employs forms of mathematical reasoning and proof appropriate to the solution of the problem at hand, including deductive and inductive reasoning, making and testing conjectures and using counterexamples and indirect proof

Math Sample Activities*

Standard: The adult learner develops and applies math strategies to a variety of situations.

Indicator A: Develops and applies number sense to solve a variety of real-life problems and to determine if the results are reasonable

	Family	Workplace	Community
Pre- Literacy	Families play board games that require players to add and subtract whole numbers to move along game path to goal.	Students play the role of a drug store customer and make purchases with correct bills and coins.	Students look through magazines and newspapers for ads. Write numerals to match number words and vice versa.
ABE I	Families play board games that require players to use basic operations with whole numbers to move along game path to goal. Students learn how to use a calculator.	Students estimate to evaluate the reasonableness of a solution produced by a calculator or cash register.	Students write a weekly grocery list of items to be purchased. Estimate the cost.
ABE II	When dividing a pizza or cake for family and communicating about the parts of the whole, students use fraction names to indicate the part.	Students inventory items at their workplace that total approximately \$10,000.	Students estimate the total number of cars that pass through the busiest intersection in their community in an hour. Students record the number and compare the result with their prediction.

ABE III	Using mixed numbers, students express the amount of money their family spends yearly on rent, food, entertainment, etc.	Students determine what percent or fraction of paycheck is paid in various taxes and deductions.	Students communicate a personal representation of the relative size of large numbers used in city, county, or school district budgets.
ASE I/ GED	Students evaluate advantages and disadvantages of purchasing a home or renting an apartment.	Students collect information from various businesses where individuals work about prices of goods. Determine best buys and provide reasons.	Students evaluate the personal costs including time and money of recycling cans, the amount received in payment, and the environmental effects. Students share with others various strategies for determining taxes and tips on a restaurant bill.
ASE II	Students use grocery receipts to find examples of the commutative, associative, distributive, identity, inverse, and/or closure properties.	Students use inventory or balance sheets or invoices to find examples of whole numbers, integers, rational, and/or irrational numbers.	Students simulate a neighborhood or school improvement project by outlining the problems in achieving the goal and the technical information needed to solve the problems.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

INDICATOR B: Applies data collection, data analysis, and probability to interpret, predict, and/or solve real-life problems

	Family	Workplace	Community
Pre-Literacy	Students conduct a simple survey among family members.	Students conduct a simple survey at the workplace.	Students conduct a simple survey among class members.
ABE I	Students use the Internet to plan a trip (e.g., calculate miles, expenses).	Students determine the number of gallons of paint needed to paint a room.	Students estimate and compare the weight of classroom objects.
ABE II	Students create a pictograph or bar graph which represents the amount of silverware in their kitchen.	Students identify 3 outcomes that are most likely, less likely, or equally likely to occur at your workplace tomorrow.	Students describe how they would choose a sample of people in their neighborhood to ask about for whom they would vote in an upcoming election.

ABE III	Students measure height and weight of each family member. Make chart. Find average, mean, range and mode.	Students develop a scale model of work area to determine alternative furniture arrangement.	Students compare and report on the temperatures of various cities using the weather charts from various newspapers.
ASE I/GED	Students graph or chart the calories and fat content of a family's favorite foods eaten in one week. Students measure a room in their house to determine and compare the total cost of various types of floor coverings.	Students use established bus routes and schedules to determine and calculate distances and time spent traveling between home and the workplace.	Students develop a possible ride-share program for the class. Measure distance, times, and routes from home to school. Students use Internet to find distances to the moon, sun, distance around the earth and express in scientific notation.
ASE II	Students gather information on children's heights in the neighborhood and determine whether the distribution of heights fits a normal curve.	Students construct a pie graph of job classifications at the workplace.	Students evaluate magazine or newspaper polls for bias in sampling procedures.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator C: Applies algebraic concepts and methods to explore, analyze or solve real-life problems

	Family	Workplace	Community
Pre-Literacy	Students work a jigsaw puzzle.	Students match patterns while hanging wallpaper.	Students determine the side of a street for a particular address.
ABE I	Students bring in samples of wallpaper patterns to class. Describe patterns. Create their own wallpaper using patterns.	Students establish a number line to determine when a project will be completed.	Students examine the scores of students over a year and determine a pattern.
ABE II	Students describe in written form the pattern in a decoration of an item in their home.	Students sort and classify according to observable attributes 50 objects at their workplace.	Students use <i>all, none, some,</i> and <i>many</i> to make reasonable statements about cites in Arizona.
ABE III	Students plan a trip to Disneyland. Calculate how long it will take to get there at differing rates of speed. Students use a calculator to figure square	Students examine and predict hiring trends based on historical data for their city. Students figure out the simple interest for	Students determine number of bleachers necessary to accommodate a specific number of spectators at a local sports field.
	roots or percents.	a new company car.	

ASE I/GED	Students chart current ages of their family and determine how old each family member will be in the year 2010. Students use signed numbers to explain credit card usage to family members.	Students develop and solve algebraic equations using simulated work situations. Students determine the hourly rate of pay when given a contract rate (yearly salary) for several employees.	Students make a Battleship board game using a four quadrant grid.
ASE II	Students make up riddles involving family members' ages using inequalities. For example: Who in the family is older than 2 and younger than 10? X > 2 and X <10; 2 < X < 10	Students assume employees are to plan and construct a 12 square foot flower garden to beautify the workplace. What shape would be "best"? Consider the relationships between area, length, width, perimeter, radius, and circumference. Graph some of the relationships.	Students compare the slopes of several handicap access ramps in the community. Evaluate for ease of use.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator D: Uses geometric properties, relationships and methods to identify, analyze and solve real-life problems

	Family	Workplace	Community
Pre-Literacy	Students identify shapes of baking dishes.	Students identify flat and solid objects found in the workplace.	Students explore classroom and label geometric shaped objects.
ABE I	Students form different geometric shapes in various colors in home and bring to class for discussion (compare & contrast). Students use different geometric shapes to	Students find and record as many examples of intersecting, parallel, and perpendicular lines in their immediate workplace.	Students compare the different roof styles in their community.
	create a family history mobile.		
ABE II	Students compare and contrast the characteristics of simple polygons in one room in their home.	Students compare and contrast characteristics of simple solid geometric figures in your workplace.	Students identify streets in their neighborhood that intersect, are parallel, or are perpendicular.
ABE III	Students describe the type of house they live in if there are no right angles.	Students poll co-workers to determine most popular size and shape of purse and/or wallet.	Students measure the angles of streets on a map that do not intersect at right angles.
	Students draw a symmetrical design for their home.		

ASE I/GED	Students design a model home. Determine how many geometric shapes make up the design. Students compare cost of building using complex geometric designs versus simple rectangular shapes (e.g., cost of hexagonal vs. rectangular foundation or frame).	Students determine how many trapezoid tables will be needed for a meeting in a given room. Students use appropriate formula to determine area of an office.	Students interview an architect to determine the best geometric design for a community center. Students draw a scale model of a parking lot in their community including parking and open spaces.
ASE II	Students investigate patio or floor tiling for geometric shapes and transformations. Design their own.	Students build an argument and draw conclusions relating to a needed change in the workplace environment.	Students enlarge or reduce a drawing through the use of a grid overlay and dilation or reduction.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator E: Applies knowledge of standard measurements to real-life situations

	Family	Workplace	Community
Pre-Literacy	Students list children and their ages.	Students create a picture file of tools needed for job.	Students survey class members to determine mode of transportation to class.
ABE I	Students discuss graph appearing in newspaper with children.	Students read and summarize table, chart or graph relating to profits and losses of a company.	Students make a graph of modes of transportation from data collected. Discuss with class.
ABE II	Students measure approximately how many square feet of carpet it would take to cover all the floors in their home.	Students estimate approximately how many hours and minutes they spend working at their job each year.	Students calculate the average high temperature of their locality for one calendar month.
ABE III	Students determine average monthly amount spent on electricity.	Students evaluate the range of wages paid for specific job positions within the workplace.	Students discuss probability of winning the lottery.
ASE I/GED	Students construct a pie graph of monthly family spending and evaluate. Use computer spreadsheet if available.	Students collect information on work environment changes desired by employees and organize it into a graphic presentation. Use computer spreadsheet if available.	Students write a letter to the school district arguing for or against changes in a school calendar based on test data on student learning. Use word processing software if available.
			Students use information from newspaper to evaluate changes in city spending for parks and recreation, welfare and roads.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator F: Uses both inductive and deductive reasoning in making conjectures and testing the validity of arguments

	Family	Workplace	Community
ASE II	Students devise a Venn diagram showing familial relationships. For example, these may include maternal and paternal generational relationships or gender relationships in the immediate family.	Students invent an alternative system for adding a column of numbers without the use of a calculator.	Students analyze an argument presented in a newspaper or magazine article or in a news or TV broadcast.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

GLOSSARY OF MATH TERMS

absolute value - a number's distance from zero on a number line

acute angle - an angle of less than 90 degrees

alternate interior angles - equal angles formed on opposite sides of a transversal passing through two or more parallel lines

angle - the measurable space (usually in degrees) between two lines that meet in a point

analyze - to examine carefully and in detail by separating something into constituent parts

area - the measure in square units of the surface of a solid or the surface of any flat region

attribute - distinctive feature or characteristic

average - the quotient of a set of numbers added, then divided by the number of members in the set

base - the bottom of the figure and/or the lower of two parallel lines

capacity - the measure of how much can be contained in a three dimensional figure

census - the total count of a population

circle - a plane curve equidistant from a center point

circumference - the boundary line or perimeter of a circle

complementary angles - adding up to 90 degrees

composite number - a number with factors other than itself and one

congruent - having the same size and shape

constant - algebraic quantity whose value does not change

coordinate - one of a set of numbers that determines the location of a point in a given dimension

corresponding angles - equal angles made by a line intersecting two parallel lines

critical thinking skills - higher level abilities including synthesis, analysis, interpretation, application, and evaluation

cube - a solid having six square faces

cylinder - a solid bounded by two parallel planes and having a circular surface

decagon - a ten-sided polygon

diagonal - in geometry, a line joining two non-adjacent vertices of a polygon

diameter - a straight line passing through the center of a circle that divides the circle in half

difference - the result in subtraction

equation - a mathematical statement in which one expression is equal to another

equilateral triangle - a three-sided figure in which all the interior angles and sides are equal

evaluate - to determine the value of

exponent - that which indicates how many times a number or variable is used as a factor

expression - an algebraic statement involving one or more terms

face - external surface area bound by edges of a solid geometric shape

factor - to determine the multiples of a certain product

factors - any two or more quantities which are multiplied together

fraction - a quantity expressed as the relationship of the parts identified (numerator) in relationship to the total number of parts of the whole (denominator)

height - the perpendicular distance from the base to the opposite vertex of geometric figures such as triangles and parallelograms

hexagon - a six-sided polygon

hypotenuse - the side opposite the right angle in a right triangle

inequality - statement indicating that two quantities are not equal

integers - a set of numbers consisting of the whole numbers and their oppositely signed expressions

interest - a charge paid for borrowing money

interior angles - the angles between two line segments formed by a transversal intersecting the line, or the angles formed by the sides of any polygon

interpret - to draw meaning from a data set by applying critical thinking skills

intersect - to meet or cut through

inverse operation - the opposite of a given process (e.g., addition and subtraction, multiplication and division)

isosceles triangle - a three-sided figure with two equal sides and two equal angles

length - the measure of the greatest dimension

like terms - terms that contain exactly the same variable(s) with the same exponent(s)

mass - the measure of the quantity of matter a body contains

mean - another word for arithmetic average

median - the middle value in a set of numbers arranged in sequential order

mode - the value that occurs most frequently in a given series of numbers

number meaning - the quantity or set of objects represented by a numeral or number word

number word - the representation of a quantity or set of objects using a literary symbol (e.g., seven, thirty)

numeral - the representation of a quantity or set of objects using a number symbol (e.g., 7, 30)

obtuse - an angle whose measure is greater than 90 degrees, but less than 180 degrees

octagon - an eight-sided polygon

order of operations - the sequence in which operations are to be performed in an expression or equation (i.e., operations within parentheses, then exponents, then multiplication, division, addition, subtraction)

ordered pairs - pairs of numbers (x and y coordinates) which define a point on a rectangular coordinate grid

parallel - lying in the same plane, separated by the same distance, never intersecting

parallelogram - a four-sided figure in which opposite sides are parallel

pentagon - a five-sided polygon

percent - the proportional relationship of the fractional expression of any quantity and that quantity expressed as parts of 100 (e.g., 1/2=50/100=50%)

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perimeter - the outer boundary of an area
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perpendicular - intersecting at or forming right (90 degree) angles

 $pi(\pi)$ - the ratio of the circumference to the diameter of a circle (usually rounded to 3.14)

place value - the numeric category/grouping (e.g., (in base 10) ones, tens, hundreds, that a numeral represents according to its position in the overall numeral)

plane - a surface containing all the straight lines connecting any two points on it

point - the intersection of two lines

polygon - a closed plane figure whose sides are line segments (e.g., pentagon 5-sided)

prime factor(s) - the factor(s) of a number which cannot be broken down into other factors

prime number(s) - a number with no other factors except itself and one

probability - a number expressing the likelihood of occurrence of a specific event

product - the result in multiplication

proportion - an equality between ratios

Pythagorean Theorem - in a right triangle, the square of the hypotenuse is equal to the sum of the squares of the other two legs

quadrilateral - a four-sided polygon

quotient - the result in division

radius - a line segment from the center of a circle to its edge

range - the difference between the greatest and smallest values in a set of numbers

ratio - the relative size of two quantities expressed as the quotient of one divided by the other

rational number - whole number, fraction, or decimal

rectangle - a parallelogram with four right angles

rectangular container - a solid having six rectangular faces

rectangular coordinate plane - a grid where a horizontal line called the x-axis and a vertical line called the y-axis intersect perpendicularly at a point called the origin

reflex angle - an angle whose measure is greater than 180 degrees and less than 360 degrees

rhombus - a parallelogram with four equal sides

right angle - a 90 degree angle

right triangle - a triangle containing a 90 degree angle

round - express a number to its nearest designated equivalent

sampling - a systematically determined part of a larger group used to make predictions about characteristics of the larger group

scale (to scale) - a convenient representation of one quantity or magnitude in terms of another

scalene triangle - a triangle with three unequal sides and angles

scientific notation - a shorthand way of writing large or small numbers using the powers of ten

side - linear boundary of a plane geometric shape

similar figures - objects or figures that are the same shape but not necessarily the same size

slope - the relationship of the rise or decline of a line to the run of the line as measured on a coordinate plane

square - a rectangle with four sides of the same length

square root - two equal factors of a number

sum - the result obtained by addition

supplementary - adding up to 180 degrees

symmetry - characteristic of a geometric shape in which a line can be drawn producing congruent mirror images

term - an algebraic quantity containing a sign with a constant and/or variable

transversal - a line that intersects one or more other lines

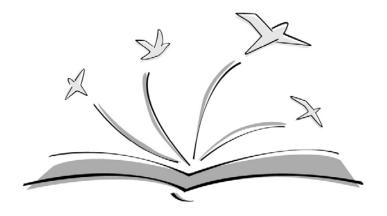
trapezoid - a quadrilateral in which one pair of opposite sides is parallel

triangle - a three-sided polygon

variable - a symbol used to represent a quantity capable of assuming any value

vertex - the point at which two lines intersect or meet to form one or more angles
volume - the amount of space measured in cubes occupied by an object or region of space
weight - the measurement of the mass of an object in relation to the gravitational force attracting it
width - the measurement of something from side-to-side

READING STANDARDS



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Standard: The adult learner develops and applies reading strategies for the understanding of written materials.

Pre-Literacy

Indicator A: Applies recognition and decoding strategies to pronounce and derive the meaning of words

- 1. Identifies upper- and lower-case letters
- 2. Applies phonetic skills
- 3. Recognizes familiar word patterns
- 4. Applies picture clues
- 5. Recognizes basic sight words

Indicator B: Applies reading skills to functional and informational text

- 1. Identifies common functional signs, directions, and maps
- 2. Reads and comprehends short simple sentences

ABE I

Indicator A: Applies recognition and decoding strategies to pronounce and derive the meaning of words

- 1. Recognizes basic word patterns, antonyms, and synonyms
- 2. Applies syllabication

Indicator B: Applies reading skills to functional and informational text

- 1. Follows single step directions
- 2. Draws conclusions
- 3. Identifies the relevant facts
- 4. Sequences events, actions, and behaviors

Indicator C: Applies reading skills to interpret literary selections

- 1. Comprehends the meaning of literary selections and makes connections between the text and his/her own experiences
- 2. Describes the story elements of plot, setting, and characters, including the beginnings, middles and endings of reading selections
- 3. Identifies the theme in reading selections

ABE II

Indicator A: Applies recognition and decoding strategies to pronounce and derive the meaning of words

- 1. Recognizes homophones and homographs
- 2. Applies context clues
- 3. Knows and uses structural analysis

Indicator B: Applies reading skills to functional and informational text

- 1. Follows multiple step directions
- 2. Summarizes the main ideas and supporting details
- 3. Identifies the author's main purpose
- 4. Makes predictions about events, actions, and behaviors
- 5. Identifies cause and effect relationships
- 6. Reads and interprets charts, graphs, and labels and simple authentic materials found in the community or workplace
- 7. Applies skimming and scanning reading strategies to locate information and determine the main idea in print and graphic material

Indicator C: Applies reading skills to interpret literary selections

- 1. Determines the underlying theme or author's message and relates them to prior experiences or the experiences of others
- 2. Identifies the historical and cultural perspectives in reading selections

ABE III

Indicator A: Applies recognition and decoding strategies to pronounce and derive the meaning of words

- 1. Identifies the meaning of root words
- 2. Identifies the meaning of prefixes
- 3. Identifies the meaning of suffixes
- 4. Applies context clues to confirm meaning of figurative, idiomatic and technical words
- 5. Recognizes the meaning of word origins

Indicator B: Applies reading skills to interpret functional and informational text (e.g., consumer information, newspapers, civics documents, science publications)

- 1. Identifies the main idea, critical details, and author's point of view and relates them to other sources, real life, and related topics
- 2. Summarizes the text in chronological, spatial, or logical order
- 3. Distinguishes facts from opinions
- 4. Makes inferences about the author's purpose and perspective
- 6. Supports conclusions with convincing textual evidence

Indicator C: Applies reading skills to interpret literary selections

- 1. Makes defensible inferences about the events, setting, mood, plot, characters and meaning of the reading selections, including how they are presented by different authors
- 2. Identifies literary devices that define a writer's style with emphasis on the use of figurative language
- 3. Explains how an author's life and time are reflected in his or her work
- 4. Compares versions of traditional or contemporary literature from different cultures for similarities and differences related to themes or characters
- 5. Describes the literary elements and characteristics of fiction, nonfiction, drama, and poetry

ASE I/GED

Indicator A: Applies recognition and decoding strategies to pronounce and derive the meaning of words

- 1. Distinguishes between the denotative and connotative meanings of words and explains "shades of meaning" for related words
- 2. Infers the meaning of words from context clues and word relationships, including idioms, analogies, metaphors, allusions, similes, and derivations

Indicator B: Applies reading skills to interpret and evaluate functional and informational text

- 1. Describes the thesis or point of view of a selection
- 2. Extracts critical details and extends the ideas in the reading selection
- 3. Distinguishes a conclusion from supporting statements
- 4. Distinguishes among facts, supported inferences, and opinions
- 5. Makes useful connections to other topics and extends ideas presented in text
- 6. Recognizes the role that values play in the beliefs and perspectives of authors
- 7. Evaluates the logic and clarity of many functional documents
- 8. Assesses the accuracy and reliability of facts as determined by documentation or proof

Indicator C: Applies reading skills to interpret literary selections drawn from American and world literature

- 1. Evaluates the influence of culture, ethnicity, and historical eras on the themes, supporting the inferences with evidence from the selection
- 2. Makes defensible inferences about the interactions between characters (e.g., conflicts, motivations, relationships) and how they affect the events and plot
- 3. Evaluates the relevance of setting (place, time and customs) to the mood, tone and meaning of text, using textural evidence to support the claims
- 4. Supports a judgment about the effectiveness of an author's use of literacy elements and figurative language

ASE II

Indicator A: Applies recognition and decoding strategies to pronounce and derive the meaning of words

- 1. Identifies and uses idioms and the literal and figurative meanings of words in speaking and writing
- 2. Uses knowledge of Greek, Anglo-Saxon and Latin roots to understand content area vocabulary words

Indicator B: Applies reading skills to interpret and evaluate functional and informational text

- 1. Recognizes unstated assumptions, extracts critical details, and extends the information from the text
- 2. Evaluates technical journals or workplace documents for purpose, organizational pattern, clarity, and relevancy of information
- 3. Describes and connects the essential ideas, arguments, and perspectives of text
- 4. Assesses the adequacy or appropriateness of data to substantiate hypotheses, conclusions, or generalizations
- 5. Evaluates the author's use of bias and use of persuasive strategies to elicit a desired response from the reader
- 6. Identifies logical fallacies in arguments

Indicator C: Applies reading skills to interpret literacy selections drawn from American and world literature

- 1. Evaluates the structural elements of plot
- 2. Compares and contrasts the motivations and reactions of literary characters from different eras and cultures confronting similar situations or conflicts
- 3. Analyzes how a work of literature reflects the heritage, traditions, attitudes and beliefs of its author and/or times
- 4. Analyzes how an author's choice of words appeals to the senses, suggests mood, and sets tone
- 5. Compares works that express a universal theme, often providing credible evidence to support his/her ideas

Reading Performance Standards

Pre-Literacy

Beginning

The student:

- recognizes a few upper and lower case letters and knows a few consonant sounds
- demonstrates phonemic awareness of a few initial and final sounds
- reads and comprehends up to 50 percent of the words on a Basic Sight Word List

Approaching

The student:

- recognizes many upper and lower case letters and many consonant sounds
- shows evidence of using decoding skills (i.e., phonetic, word patterns) to read and understand some new words
- reads and comprehends some familiar words and phrases and some short simple sentences on familiar topics
- reads and comprehends more than 50 percent but less than 70 percent of the words on a Basic Sight Word List

Met

The student:

- often recognizes upper and lower case letters and many consonant sounds
- uses phonetic skills to decode and derive the meaning of most single syllable words
- applies reading strategies to comprehend many familiar words and most short simple sentences on familiar topics and common functional directions, signs, and maps
- reads and comprehends at least 70 percent but less than 90 percent of words on a Basic Sight Word List

Exceeds

- consistently recognizes upper and lower case letters and consonant sounds
- uses phonetic skills to decode and derive the meaning of most one and two syllable words
- applies reading strategies to comprehend most short sentences on both familiar and unfamiliar topics and functional directions, signs, and maps
- reads and comprehends at least 90 percent of the Basic Sight Word List

ABE I

Beginning

The student:

- knows and applies a few word patterns and context clues to sporadically derive the meaning of new words
- comprehends a few simple and compound sentences in single or linking paragraphs and demonstrates such comprehension by pin-pointing answers in text
- on occasion is able to identify the basic facts and ideas in what he/she has read

Approaching

The student:

- uses phonics, structural analysis, syllabification and word parts to derive the meaning of some new words and applies this knowledge for fluent oral and silent reading
- sometimes is able to identify the basic facts and sequence events, actions, and behaviors in simple functional and informational texts
- is able to interpret many single step directions and common schedules, signs and maps
- fills out most simple forms but needs support on completing more complex ones
- comprehends the meaning of some short stories and narrative passages and can make some obvious connections between the text and personal experiences

Met

- uses phonics, structural analysis, syllabification, word parts and patterns to derive the meaning of many new words and applies this knowledge for fluent oral and silent reading
- uses knowledge of antonyms and synonyms to determine the meaning of many words and phrases
- often is able to identify the basic facts and sequence events, actions, and behaviors in simple functional and informational texts
- consistently is able to interpret single step directions and many common schedules, signs and maps
- often is able to draw appropriate and relevant conclusions from functional and informational text
- comprehends the meaning of many short stories and narrative passages and can make some obvious connections between the text and personal experiences
- often identifies and describes the story elements of plot, setting, theme, and characters, including the beginnings, middles and endings of short stories and other simple literary selections

Exceeds

- knows and uses simple word families and basic word patterns, including some suffixes and prefixes to decode most new words encountered when reading
- applies knowledge of antonyms, synonyms, homophones and homographs to decode many unfamiliar words
- consistently is able to identify the basic facts and ideas in simple functional and informational texts and sequence events, actions, and behaviors in simple functional and informational texts
- consistently draws appropriate and relevant conclusions from functional and informational text
- often is able to extract significant information about topics in a reading selection
- consistently describes the plot, setting and characters in literary selections
- often identifies themes in literary selections in fictional and non-fictional works, and relates them to prior experiences or the experiences of others

ABE II

Beginning

The student:

- uses phonics, structural analysis, syllabification and word parts to derive the meaning of a few new words
- often is able to identify the basic facts in simple functional and informational texts yet only on occasion is able to summarize the main ideas and supporting details of simple functional and informational texts
- is able to interpret a few multi-step directions
- often describes the story elements of plot, setting and characters and sometimes is able to relate them to prior experiences or the experiences of others

Approaching

The student:

- uses phonics, structural analysis, syllabification and word parts to derive the meaning of some new words
- is able to interpret and follow some multiple step directions
- sometimes is able to identify the basic facts, sequence events and summarize the main ideas and supporting details in simple functional and informational texts
- sometimes is able to interpret multi-step directions, schedules, signs and maps
- fills out most simple forms but needs support on completing more complex ones
- is able to describe the plot, setting and characters in many literary selections and identifies themes and basic historical and cultural perspectives in some literary selections
- comprehends the meaning of some short stories and narrative passages and can make some obvious connections between the text and his/her own experiences

Met

- knows and uses complex word families, suffixes, and prefixes to decode many unfamiliar words
- uses knowledge of antonyms, synonyms, homophones and homographs, and context to determine the meaning of many words and phrases
- is able to interpret and follow most multiple step directions
- often is able to identify cause and effect relationships and author's main purpose in expository text
- often is able to summarize main idea and supporting details in expository text
- often is able to scan print and graphic material to locate items of information

- reads and interprets many uncomplicated charts, graphs, and labels and can interpret some authentic material found in the community or workplace if familiar with the topic
- often is able to skim print and graphic material to determine the main idea and develop an initial personal reaction
- comprehends the meaning of many short stories and narrative passages and is able to state personal reactions to text
- often recalls major points in text and makes and revises predictions about coming information
- is able to describe the plot, setting and characters and determine the underlying theme or author's message in most fictional and non-fictional works, and relate them to prior experiences or the experiences of others
- identifies themes and basic historical and cultural perspectives in many literary selections

Exceeds

- knows and uses complex word families, suffixes and prefixes to decode most new words encountered when reading
- applies knowledge of antonyms, synonyms, homophones and homographs to decode the meaning of most unfamiliar words and phrases
- monitors texts for unknown words and consistently determines their meaning using sentence and word context to find meaning
- reads and interprets most uncomplicated charts, graphs, and labels and simple authentic materials found in the community or workplace if familiar with the topic
- consistently distinguishes between cause and effect and main idea and supporting details in expository text
- consistently extracts appropriate and significant information from text, including problems and solutions
- consistently determines the author's main purpose, as well as generalizes about topics in most reading selections
- explains main ideas and concepts presented in texts, often identifying and assessing evidence that supports those ideas
- consistently describes, with some analysis, the plot, setting and characters in literary selections
- explains how a work of literature is related to the themes, culture, and issues of its historical period

ABE III

Beginning

The student:

- applies structural analysis and context clues to derive the meaning of many unfamiliar words
- often is able to identify and summarize the main points and details of functional and informational text
- sometimes identifies author's purpose, perspective and point of view in a few text selections
- often interprets actions required to follow specific written directions and is sometimes able to complete such reading tasks related to life roles as filling out medical forms, order forms and job applications
- occasionally distinguishes fact from opinion in functional and information text
- makes some minimal inferences about and compares and contrasts information from familiar literary selections, including at times how plots, settings and characters are presented by different authors

Approaching

The student:

- derives meaning of some new vocabulary by using word origins and word relationships.
- sometimes is able to predict outcomes, make inferences about the author's purpose and perspective, and support conclusions about functional and informational text
- consistently interprets actions required to follow specific written directions
- often is able to complete such reading tasks related to life roles as filling out medical forms, order forms and job applications
- demonstrates an understanding of the text as a whole and sometimes is able to draw parallels to real life and related topics
- draws minimal conclusions about text and supports them with some textual evidence
- sometimes is able to summarize text in chronological, spatial or logical order
- makes some defensible inferences about events, setting, characters
- compares and contrasts some of the basic literary elements of familiar literary selections, including how plots, settings and characters are presented by different authors

Met

- applies knowledge of word recognition strategies (word origins, roots, prefixes, and suffixes) to determine the meaning of many unfamiliar and technical words with high accuracy
- applies context clues to confirm the meaning of many figurative, idiomatic, and technical words
- reads and comprehends many authentic materials found in the community or workplace on everyday subjects, and effectively interprets many routine charts, graphs and tables

- often is able to summarize text in chronological, spatial, or logical order
- consistently distinguishes fact from opinion in text
- consistently draws conclusions or generalizations about text and often is able to support them with convincing textual evidence and experience
- often is able to identify the main ideas, critical details, and author's point of view and draws parallels to other sources, real life and related topics
- often is able to draw inferences about the author's purpose, perspective, and/or point of view and connects and clarifies main ideas and concepts
- often is able to compare and contrast the basic literary elements of unfamiliar literary selections, including how plots, settings, mood, and characters are presented by different authors
- often gains meaning from both literal and inferential information in unfamiliar literary texts
- often is able to identify and define the presence of figurative language in literary works, including simile, metaphor, hyperbole and personification
- often is able to explain how an author's life and time are reflected in his or her work
- often is able to compare and contrast versions of traditional or contemporary literature from different cultures for similarities and differences related to themes or characters
- identifies and describes many characteristics of non-fiction, fiction, drama and poetry as forms chosen by an author for a literary purpose

Exceeds

- applies knowledge of word recognition strategies (word origins, roots, prefixes, and suffixes) to determine the meaning of most unfamiliar and technical words with high accuracy
- applies context clues to confirm the meaning of most figurative, idiomatic, and technical words
- consistently reads and comprehends authentic materials found in the community or workplace on everyday subjects, and effectively interprets most routine charts, graphs and tables
- consistently draws conclusions or generalizations about text and is able to support them with convincing textual evidence and experience
- consistently is able to summarize text in chronological, spatial, or logical order
- distinguishes among facts, supported inferences and opinions in some text selections
- consistently connects and clarifies main ideas, critical ideas, and concepts and draws parallels to other sources, real life and related topics
- describes and connects the essential ideas, arguments and perspectives of text and supports those assertions with elaborated and convincing textual evidence
- describes the function and effect of key literary devices such as imagery and symbolism in most fiction, nonfiction, and poetry selections
- interprets descriptive passages from literary text and summarizes meanings from unfamiliar topics or text using more complex language structures
- evaluates how the writer uses literary devices to create events, setting, mood, plot and characters in unfamiliar literary selections
- explains the distinct historical and cultural influences on the text and how a work of literature reflects the life and time of its author

- consistently is able to compare and contrast versions of traditional or contemporary literature from different cultures for similarities and differences related to themes or characters
- identifies and describes most characteristics of non-fiction, fiction, drama and poetry as forms chosen by an author for a literary purpose

ASE I/GED

Beginning

The student:

- infers a few word meanings through identification and explanation of analogies, other word relationships, and descriptive and figurative language
- interprets and analyzes some charts, graphs and tables from expository texts on unfamiliar topics
- often identifies the main ideas and critical details of expository text and on occasion can extend the ideas by drawing parallels to other sources, real life and related topics
- draws conclusions or generalizations about text and is able to support them with some convincing textual evidence and experience
- draws some inferences about the theme of a literary selection and understands that the theme of a selection represents a view or comment on life

Approaching

The student:

- infers some word meanings through identification and explanation of analogies, other word relationships, and descriptive and figurative language
- demonstrates an overall understanding and makes some interpretations of selected informational and literary selections
- develops opinions about expository text and sometimes can extend the ideas by making inferences and connections, drawing conclusions and relating ideas in the text to their personal experiences
- sometimes is able to identify the role values play in the beliefs and perspectives of authors
- is able to explain how culture, ethnicity, and historical eras are represented in some literary texts
- draws logical inferences about the theme of many literary selections and sometimes is able to explain how the theme of a selection represents a view or comment on life
- often is able to identify and define the presence of figurative language in literary works (simile, metaphor, hyperbole and personification) and occasionally is able support a judgment about the effectiveness of the elements of an author's style

Met

The student:

- infers the meaning of many words from context clues and word relationships, including idioms, analogies metaphors, allusions, similes and derivations
- understands and explains "shades of meaning" for many related words
- distinguishes between the denotative and connotative meanings of many words and often is able to interpret the connotative power of words
- distinguishes among facts, supported inferences, and opinions in many functional and informational reading selections
- often is able to develop supported opinions about the thesis or point of view of expository text and identifies and relates aspects of text to its overall meaning
- often is able to identify the role values play in the beliefs and perspectives of authors
- evaluates the logic of many functional documents such as the sequencing and relevancy of information and procedures, anticipation of possible reader misunderstandings and their visual appeal
- often is able to assess the adequacy, accuracy and reliability of an author's facts to support claims and assertions
- often is able to evaluate the influence of culture, ethnicity, and historical eras on the themes, including how the theme or meaning of a selection represents a view or comment on life, using convincing textual evidence to support the claims
- makes many defensible inferences about the interactions between main and subordinate characters in literary text (e.g., conflicts, motivations, relationships and influences) and how they affect the events and plot
- often is able to evaluate the relevance of setting (place, time and customs) to the mood, tone and meaning of text using textural evidence to support the claims
- identifies many significant literary devices that define a writer's style such as metaphor, symbolism, dialect and irony, and uses those elements to interpret the work

Exceeds

- consistently infers the meaning of words from context clues and word relationships, including idioms, analogies metaphors, allusions, similes and derivations
- consistently understands and explains "shades of meaning" for related words
- distinguishes between the denotative and connotative meanings of many words and consistently is able to interpret the connotative power of words
- consistently is able to develop supported opinions about the thesis or point of view of expository text and identifies and relates aspects of text to its overall meaning
- evaluates the accuracy and reliability of the facts, hypotheses, conclusions, and related evidence, and the fallacy or logic in the arguments presented
- consistently is able to identify the role values play in the beliefs and perspectives of authors
- reads, interprets and integrates information from a wide range of texts, charts and graphs
- responds to classic and contemporary American and world literature selections which include inferential as well as literal information, generally giving responses that are thorough, thoughtful and extensive

- consistently is also able to analyze the author's use of literary devices
- evaluates how such literary elements as point of view, tone, voice, characterization and irony are used for specific purposes
- consistently is able to analyze how a work of literature is related to the themes and issues of its historical period

ASE II

Beginning

The student:

- identifies and uses idioms and the literal and figurative meanings of a few words in speaking and writing
- uses knowledge of Greek, Anglo-Saxon and Latin roots to understand a few content area vocabulary words
- on occasion is able to assess the adequacy, accuracy and appropriateness of an author's facts to support claims and assertions, noting instances of bias and stereotyping (e.g., facts, illustrations, anecdotes, quotations and imagery)
- develops opinions about expository text and on occasion is able to describe and connect the essential ideas and perspectives of text and support those assertions with textual evidence

Approaching

- identifies and uses idioms and the literal and figurative meanings of some words in speaking and writing
- uses knowledge of Greek, Anglo-Saxon and Latin roots to understand some content area vocabulary words
- sometimes is able to assess the adequacy, accuracy and appropriateness of an author's facts to support claims and assertions, noting instances of bias and stereotyping (e.g., facts, illustrations, anecdotes, quotations and imagery)
- develops opinions about expository text and sometimes is able to describe and connect the
 essential ideas, arguments and perspectives of text and support those assertions with textual
 evidence
- sometimes is able to note instances of unsupported inferences, fallacious reasoning and persuasive and propaganda techniques in text
- evaluates the coherence and logic of many technical journals or workplace documents
- sometimes is able to compare and contrast themes, motivations and reactions of literary characters from different historical eras and cultures confronting similar situations or conflicts (e.g., man vs. nature; freedom and responsibility; individual and the society)
- sometimes is able to analyze how an author's choice of words appeals to the senses, suggests mood, and sets tone

Met

The student:

- identifies and uses idioms and the literal and figurative meanings of many words in speaking and writing
- uses knowledge of Greek, Anglo-Saxon and Latin roots to understand many content area vocabulary words
- develops opinions about expository text and often is able to clearly and concisely describe and connect the essential ideas, arguments and perspectives of text and support those assertions with convincing textual evidence
- analyzes the meaning of many selected periodicals and other library references and supports the analyses with specific examples from the text
- often is able to recognize unstated assumptions, extract critical details, and extend the information from the text by relating it to his or her experiences and to the world
- evaluates the coherence, logic, internal consistency and organizational patterns of many technical journals or workplace documents
- often is able to assess the adequacy, accuracy and appropriateness of an author's facts to support claims and assertions, noting instances of bias and stereotyping (e.g., facts, illustrations, anecdotes, quotations and imagery)
- identifies the logical fallacies in many arguments
- evaluates many of the structural elements of the plot (e.g., subplots, parallel episodes, climax), its development and how and whether conflicts are addressed and resolved
- compares works that express a universal theme, often providing credible evidence to support their ideas
- often is able to explain the distinct historical and cultural influences of the text and how a work of literature reflects the heritage, traditions, attitudes and beliefs of its author
- often is able to compare and contrast themes, motivations and reactions of literary characters from different historical eras and cultures confronting similar situations or conflicts (e.g., man vs. nature; freedom and responsibility; individual and the society)
- often is able to analyze how an author's choice of words appeals to the senses, suggests mood, and sets tone
- describes themes and ideas contained within many literary selections from a range of American and world literature

Exceeds

- identifies and uses idioms and the literal and figurative meanings of most words in speaking and writing
- consistently uses knowledge of Greek, Anglo-Saxon and Latin roots to understand many content area vocabulary words
- applies a wide range of comprehension, application, analytical and evaluative reading strategies to interpret selected informational text and some professional journals
- evaluates the credibility and comprehensiveness of evidence and related generalizations that comprise an author's presentation of an argument or defense of a claim, including how a

- writer's intent may affect text credibility, structure and tone (e.g., professional journals, editorials, political speeches, primary source material)
- consistently is able to recognize unstated assumptions, extract critical details, and extend the information from the text by relating it to his or her experiences and to the world
- consistently evaluates the coherence, logic, internal consistency and organizational patterns of technical journals or workplace documents
- extends ideas presented in primary or secondary sources through original analysis, evaluation and elaboration
- describes abstract themes and ideas contained within complex literary selections from a range of American and world literature
- relates literary works and authors to major themes and issues of their eras
- analyzes the philosophical, political, religious, ethical and social influences that have shaped authors' development of characters, plots and settings

Reading Sample Activities*

Standard: The adult learner develops and applies reading strategies for the understanding of written materials

Indicator A: Applies recognition and decoding strategies to pronounce and derive the meaning of words

	Family	Workplace	Community
Pre-Literacy	Students recognize letters in family members' names using a name game format. Students associate written words with common household items (e.g., door, wall, TV, pot, sink). Students listen to single syllable rhyming words and generate additional words.	Students match words with workplace signage. Students apply phonetic rules to vocabulary found on paycheck stub and other simple work-related documents.	Students identify sight words (e.g., Dolch word list, in newspapers). Students recognize letters and sight words found in community buildings (e.g., post office, grocery store, schools).

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ABE I	Students pronounce words correctly in selected readings. Students use knowledge of antonyms, synonyms, homophones and homographs to determine meaning of words.	Students apply decoding strategies to unfamiliar words in the workplace. Students follow directions written in simple sentences. Students locate parts for customers from an alphabetical list.	Students decode rhyming words in "My Country 'Tis of Thee" using consonant and vowel sound relationships. Students alphabetize a class list for birthday celebrations. Students decode words in context in "The Pledge of Allegiance" by using phonetic letter/sound relationships. Students identify the meaning of safety signs. Students identify basic vocabulary used in restaurant menus.
ABE II	Students use the thesaurus to determine related words and concepts Students use knowledge of root words to determine the meaning of unknown words within a passage on family life.	Students refer to the glossary to identify and define unfamiliar words found in a benefits package. Students read and understand job-specific vocabulary when reading workplace materials such as health and safety postings in a workplace. Students read and interpret abbreviations found in want ads.	Students use the yellow pages to locate names and addresses of local businesses that offer services. Students use the phone book to determine the location of public services. Students identify basic vocabulary used in a newspaper or magazine ads.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ABE III	Students apply decoding strategies to unfamiliar words in any instructional manual to assemble and to connect the various parts of a personal computer or other devices. Students apply decoding strategies to unfamiliar words to interpret standardized test results and/or special education documents.	Students apply decoding strategies to unfamiliar words in a work related policy and procedures manual. Students read and identify vocabulary on performance evaluation forms. Students peruse a dictionary to find meanings of terms used in government brochures.	Students use vocabulary knowledge to read sources of information about community referral agencies and the services that they offer. Students identify and define Greek and Latin root words and their variations. Use the "physicians" section of the yellow pages and medical insurance coverage booklets to find words containing these roots. Determine their meaning. Students use context clues to derive meaning from public service pamphlets such as a first aid instruction pamphlet, public service posters, street signs, and directions and cautions on medicine labels and toxic household products.
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^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ASE I/GED	Students apply decoding strategies to unfamiliar words in VCR manual.	Students apply decoding strategies to unfamiliar words in a work-related technical manual. Students monitor expository writing for unknown words or words with novel meanings, using word, sentence and paragraph clues to determine meaning. Students use knowledge of technical vocabulary to read and comprehend manuals for new equipment at the workplace.	Students apply decoding strategies to unfamiliar words in a sample voting ballot on propositions. Students use a dictionary or textbook glossary to find definitions for terms used in political campaigns. Students understand the history of English language and use word origins to determine the historical influences on English word meanings
ASE II	Students identify and use idioms, cognates and the literal and figurative meanings of words in speaking and writing in popular magazines. Students distinguish between the denotative and connotative meanings of words and interpret the connotative power of words in the "Life Section" of the newspaper.	Students apply knowledge of Anglo-Saxon, Greek and Latin roots and affixes to draw inferences concerning the meaning of scientific and mathematical terminology. Students apply such context clues as definition, restatement, example, comparison, contrast, cause and effect to discern word meanings in workplace documents.	Students trace the etymology of significant terms used in political speeches.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator B: Applies reading skills to functional and informational text

	Family	Workplace	Community
Pre-Literacy	Students create and read short simple sentences using pre-printed word cards. Students listen to dictated word list and select corresponding flash card.	Students match vocabulary with common workplace signage. Students recognize terminology of simple job opportunities.	Students use newspaper ads to match vocabulary with pictures (e.g., grocery, drug store, hardware). Students create shopping list from newspaper ads.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ABE I Students compare food prices using printed materials (e.g., newspaper ads, coupons, signs).

Students apply reading skills to materials relating to family (short selections from parenting magazines, advice columns, health-related publications, short stories about family).

Students read and follow simple instructions (e.g., a recipe, assembling instructions, children's homework assignments).

Students read other student's writings.

Students devise a grocery list using local advertisements.

Students read labels on medicines and cleaning products.

Students arrange a list of daily activities in sequence.

Students summarize main idea of a memo for co-worker.

Students apply reading skills to functional and informational text (e.g., consumer information, standard civic documents, and employment forms).

Students identify and use common abbreviations in the workplace (e.g., weight, time, distance, costs, public signage).

Students identify facts and main idea in company newsletter articles.

Students arrange a list of work-related activities in sequence.

Students read community events/activities calendar.

Students identify main ideas in one another's writings and articles of local interest.

Students analyze a voter registration form to determine voter qualifications.

Students examine a ballot to determine what political parties are represented.

Students read a letter to "Dear Abby" and predict her answer.

Students read a movie review in the newspaper and restate the author's conclusions.

Students use the yellow pages to locate names and addresses of local businesses that offer services.

Students use the phone book to determine the location of public services.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

	Family	Workplace	Community
ABE II	Students make a program schedule for TV listing the days, times and programs that their family will watch.	Students scan, read, and use information from charts, graphs, tables and maps using newspapers, magazines, consumer ads, and transportation schedules.	Students trace a route on a city map. Use phone book/Internet to locate nearest public services.
	Students read and complete forms (e.g., applications for programs that benefit families, school-related forms). Students create verbal narrative highlighting the sequence of one week's activity. Students access account balance on ATM. Students prepare a one-month activity calendar.	Students follow written directions for completing employment forms (e.g., job application, I-9, W-1040, W-2, medical insurance enrollment form). Students create verbal narrative highlighting the sequence of one week's activity at the workplace. Students use employment-related reference materials to locate information. Students interpret and analyze employment information in local newspapers.	Students use media reports of local news including cartoons, photographs and headlines to draw conclusions and make predictions. Students identify local issues and read factual information in newspaper and other sources to analyze cause and effect. Students determine the basic terms of a product warranty. Students examine a newspaper article about a local political issue. Restate the problem and the solutions which are suggested.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

	Family	Workplace	Community
ABE III	Students evaluate the terms of a lease	Students read a work memo or project report to verify	Students use reading strategies to
	or a contract by restating the terms,	understanding and explain information.	interpret news, reports, maps, one
	asking pertinent questions, and using		another's writing, schedules, official
	prior knowledge to make a decision	Students compare information on invoices and charge	documents, local stories.
	about leasing an apartment or a house,	slips to verify dates and specific charges.	
	purchasing a car or appliances.		Students use reading strategies to
		Students interpret information listed on a payroll stub,	complete questions on a consumer
	Students use reading strategies to	state and federal income tax forms.	survey.
	complete questions on a community-	Students seem meed was information from about a graphs	Ctudente communicathe mecanine of
	related survey.	Students scan, read, use information from charts, graphs,	Students summarize the meaning of
	Students use a food chart to analyze	tables, maps and diagrams using the newspaper, trade magazines, consumer ads, transportation schedules and	the lyrics to the National Anthem.
	their diet.	electronic messaging.	Students inspect data on weather
	then diet.	electronic messaging.	charts in the newspaper to determine
	Students listen to statements and	Students follow directions for completing more complex	the weather forecast for a specified
	determine which is fact or opinion.	job applications, I-9, W-4, and medical insurance	area and date, such as a major
	determine which is fact of opinion.	enrollment forms.	holiday.
	Students examine "junk mail" and	Cinomical forms.	nonday.
	other promotional materials for factual	Students consult standard reference material (e.g.,	Students compare political graphs in
	accuracy.	occupational reference manuals, job search aids with	the newspaper just prior to an election
		technology-based resources, for career exploration).	to discuss possible outcomes.
		Students read and interpret common workplace policies	Students analyze the symbolism in a
		and/or procedures (e.g., drug-free workplace, dress code,	political cartoon to determine its
		sexual harassment, grievance).	meaning.
		Students apply critical-thinking and problem- solving	Students use an editorial from the
		skills to written workplace simulations.	daily newspaper to determine the
			author's purpose, position, and bias.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Family	Workplace	Community
Students recognize values and	Students analyze written job descriptions to determine the	Students research economic initiatives
evaluate reasoning involved in local political issues and decisions affecting	underlying messages and values that they represent.	and their effect on the local environment.
families.	Students compare and contrast a specific job at different	
	sites as outlined in job description.	Students analyze reports on local,
		national and global ecological issues.
implications of public policy decisions		
related to family quality of life (e.g., education, child care, transportation).	conclusions from charts, graphs, tables, diagrams and maps.	Students examine a news article from local newspapers that describe a
		political or social problem facing the
Students research one health-related issue on the Internet.	Students apply sequence skills by using a real or fictitious accident report to recreate order of events leading to	local community.
	claim.	Students examine political cartoons to
Students examine articles from a		find implied main idea.
variety of national and international	Students use local labor market trends to predict best-case	_
newspapers written on the same topic.	scenarios for current and future employment options.	Students summarize main idea and
		find facts and opinions in local
Students complete tax form on computer.	Students evaluate web pages of companies within the same industry.	newspaper articles.
	,	Students analyze Chamber of Commerce literature to compare with
		students' experience.
		Students track one legislative initiative from inception to resolution.
	Students recognize values and evaluate reasoning involved in local political issues and decisions affecting families. Students understand core issues and implications of public policy decisions related to family quality of life (e.g., education, child care, transportation). Students research one health-related issue on the Internet. Students examine articles from a variety of national and international newspapers written on the same topic. Students complete tax form on	Students recognize values and evaluate reasoning involved in local political issues and decisions affecting families. Students understand core issues and implications of public policy decisions related to family quality of life (e.g., education, child care, transportation). Students research one health-related issue on the Internet. Students examine articles from a variety of national and international newspapers written on the same topic. Students analyze written job descriptions to determine the underlying messages and values that they represent. Students compare and contrast a specific job at different sites as outlined in job description. Students analyze work-related information and draw conclusions from charts, graphs, tables, diagrams and maps. Students apply sequence skills by using a real or fictitious accident report to recreate order of events leading to claim. Students use local labor market trends to predict best-case scenarios for current and future employment options. Students evaluate web pages of companies within the

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

	Family	Workplace	Community
ASE II	Students determine cause and effect relationships between economic systems and daily family experience. Students analyze different points of view on family-related issues (e.g. budgeting and finance, child rearing practices, communications, and stress management). Students examine family life by using research about the influences on human behavior (e.g., the primary need for survival, environment, heredity, gender issues, cultural diversity). Students determine the terms of a product warranty and summarize the process for registering a claim covered by the warranty. Students evaluate a loan application.	Students evaluate economic trends in the local, regional, and global marketplace. Students analyze issues related to psychology of the workplace (e.g., physical environment, human relation, behavior). Students use local labor market trends to predict best-case scenarios for current and future employment options. Students analyze assumptions and conclusions presented in motivational texts written by business leaders. Students critique a manual for its visual appeal and logic of sequence. Students evaluate a company policy statement.	Students recognize values and evaluate reasoning involved in local political issues and decisions as they affect the community. Students understand issues and initiatives presented to local governing bodies. Students use the League of Women Voters' Guide to determine writers' persuasive strategies to accomplish a purpose. Students review statistical information of local area and apply understanding to local experience such as crime rate, poverty level and employment rate. Students analyze a political speech. Students analyze a state policy. Students examine a range of articles published in a magazine or newspaper and draw inferences about the political stance of that magazine or newspaper.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator C: Applies reading skills to interpret literary selections

	Family	Workplace	Community
ABE I	Students read short stories about family.	Students select and summarize a story from a company newsletter.	Students read a fictional selection and relate the theme to a true life experience that could have happened
	Students apply pre-reading and comprehension strategies on reading materials selected for personal leisure	Students participate in formal or informal book talks.	in the student's community. Students compare and contrast
	reading.	Students determine the underlying theme or author's message in fictional and non-fictional works, and relate	different versions of the same stories reflecting different cultures, and how
	Students connect information and events in texts to personal experiences.	them to prior experiences or the experiences of others (e.g., meaning of friendship; workplace values of honesty, responsibility, fairness).	the story would be different if the setting were the student's community.
	Students select and prepare readings from children's story books to read to a child.		
	Students retell familiar stories.		
ABE II	Students compare and contrast tales from different cultures and describe the different family traditions represented.	Students compare and contrast tales from different cultures and describe the different work traditions for men, women, and children.	Students compare and contrast tales from different cultures by tracing the exploits of one character type and develop theories to account for similar tales in diverse cultures and communities (e.g., trickster tales).
ABE III	Students compare and contrast motivations and reactions of literary characters from different historical eras and cultures confronting similar family situations or conflicts.	Students analyze how the qualities (e.g., courage or cowardice; ambition or laziness) of the character in a story affect the plot and resolution of the conflict and draw comparisons to real life and work experiences.	Students analyze how a work of literature reflects the heritage, traditions, attitudes and beliefs of its author and the community in which he or she lived.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

	Family	Workplace	Community
ASE I/GED	Students research ethnic and/or cultural roots of a literary piece. Students evaluate selections on self-esteem, parenting, personal growth, and/or personal relationships. Students identify writer's style in biographical and autobiographical accounts of culturally and historically important people.	Students compare tone and style in a variety of written correspondence between employer and employee, vendor and consumer. Students examine writings on leadership effectiveness and personal empowerment to determine how values, attitudes and beliefs are applied in the workplace.	Students select and read a variety of culturally and ethnically diverse biographical or auto-biographical short stories and determine the similarities and differences in life in the various communities. Students read regional literacy fiction or non-fiction selections and discuss their relevance to everyday life in the community.
ASE II	Students analyze the author's bias and use of persuasive strategies to accomplish a purpose in nonfiction selections on modern family life.	Students analyze the political assumptions in a selection of literary works or essays on a topic for their clarity and consistency (e.g., women's suffrage and women's place in organized labor).	Students compare and contrast U.S. culture with other cultures found in literary selections. Students analyze the philosophical, political, religious, ethical and/or social influences that have shaped characters' traits, plots and settings.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

THREE HUNDRED MOST FREQUENTLY USED WORDS IN RANK ORDER

the	has	also	day	high	going	need
of	when	did	same	upon	look	four
and	who	many	another	school	asked	within
to	will	before	know	every	later	felt
a	more	must	while	don't	knew	along
in	no	through	last	does	point	children
that	if	back	might	got	next	saw
is	out	years	us	united	program	best
was	so	where	great	left	city	church
he	said	much	old	number	business	ever
for	what	your	year	course	give	least
it	up	way	off	war	group	power
with	its	well	come	until	toward	development
as	about	down	since	always	young	light
his	into	should	against	away	days	thing
on	than	because	go	something	let	seemed
be	them	each	came	fact	room	family
at	can	just	right	though	president	interest
by	only	those	used	water	side	want
I	other	people	take	less	social	members
this	new	Mr.	three	public	given	mind
had	some	how	states	put	present	country
not	could	too	himself	think	several	area
are	time	little	few	almost	order	others
but	these	state	house	hand	national	done
from	two	good	use	enough	possible	turned
or	may	very	during	far	rather	although
have	then	make	without	took	second	open
an	do	world	again	head	face	God
they	first	still	place	yet	per	service
which	any	own	American	government	among	certain
one	my	see	around	system	form	kind
you	now	men	however	better	important	problem
were	such	work	home	set	often	began
her	like	long	small	told	things	different
all	our	get	found	nothing	looked	door
she	over	here	Mrs.	night	early	thus
there	man	between	thought	end	white	help
would	me	both	went	why	case	sense
their	even	life	say	called	John	means
we	most	being	part	didn't	become	whole
him	made	under	once	eyes	large	matter
been	after	never	general	find	big	
			•		=	

DOLCH WORD LISTS

List 1,2 and 3 know by the end of First grade

List 4 know by the end of Second grade

List 5 know by the end of Third grade

List 1	List 2	List 3	List 4	List 5
and	an	after	always	about
away	are	again	around	better
big	at	an	because	bring
blue	ate	any	been	carry
can	be	as	before	cleat
come	black	ask	best	cut
down	brown	by	both	done
find	but	could	buy	draw
for	did	every	cat	drink
funny	do	fly	cold	eight
go	eat	from	does	fail
help	four	give	don't	far
here	get	going	fast	full
in	good	had	first	got
is	have	has	five	grow
it	he	her	found	hold
jump	into	him	gave	hot
little	like	his	goes	hurt
look	new	how	green	if
make	no	last	its	keep
me	now	know	made	kind
my	on	let	many	laugh
not	our	live	off	light
one	out	may	or	long
play	please	of	pull	much
red	pretty	old	read	myself
run	ran	once	right	never
said	ride	open	sing	only
see	say	over	sit	own
to	she	put	sleep	pick
the	SO	round	tell	seven
three	soon	some	their	shall
two	that	stop	these	show
	there	take	those	six
up	they	thank		small
we where	this	them	upon	start
Wilete			us	
	too	then	use	ten
	want	think	very	today
	was	walk	wash	together
	well	were	which	try
	went	when	why	warm
	what		wish	
	white		work	
	who		would	
	win		write	
	with		your	

SCIENCE STANDARDS



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Science

Standard: The adult learner applies methods of science and technology toward the advancement of personal and community well being.

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Science

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Standard: The adult learner applies methods of science and technology toward the advancement of personal and community well being.

Pre-Literacy

Indicator A: Understands and uses the processes of scientific investigation and scientific ways of knowing. Able to design, conduct, describe and evaluate these investigations. Understands and applies concepts that unify scientific disciplines (Science as Inquiry)

- 1. Identifies and uses safe procedures in all science activities
- 2. Formulates basic questions about objects, organizations, events and relationships in a natural and designed world
- 3. Organizes (e.g., sort, classify, sequence) objects, organisms, and events by different characteristics
- 4. States simple hypothesis about cause-and-effect relationships in the environment
- 5. Performs simple measures and comparisons
- 6. Observes and describes simple systems (e.g., ant farm, plant terrarium, aquarium)
- 7. States examples of scientific inquiry familiar from previous life experience

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

- 1. Recognizes that all people can and do participate in science and technology
- 2. Identifies careers that apply science and technology
- 3. Identifies ways that scientific technology affects our daily lives, jobs and recreation
- 4. Demonstrates the proper use of simple technology (e.g., scales, balances, magnifiers, computers)

Indicator C: Understands the characteristics of living things and the diversity of life.

Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments (Life Science)

- 1. Describes the differences between living and non-living things
- 2. Describes the basic needs of living organisms for survival
- 3. Recognizes and distinguishes similarities and differences among diverse species
- 4. Identifies the various systems of the human body

Indicator D: Understands the nature of matter and energy including their forms, the changes they undergo and their interactions (Physical Science)

- 1. Identifies the physical properties of objects
- 2. Describes the physical properties (length, mass, volume, temperature, texture, etc.) common to various tangible objects
- 3. Compares objects in terms of physical properties

Indicator E: Understands the composition, formative processes, and history of the Earth, the solar system and the universe (Earth and Space Science)

- 1. Identifies the basic phenomena and dynamics of common objects in the sky (e.g. sunrise, moon, stars)
- 2. Identifies the position of the sun in relation to the nine planets
- 3. Identifies basic weather phenomena and their effect on daily activities
- 4. Identifies basic earth materials (rocks, soils, water, and gases) and their common uses
- 5. Identifies the major features of the earth's surface (mountains, rivers, plains, etc.)

ABE I

Indicator A: Understands and uses the processes of scientific investigation and scientific ways of knowing. Able to design, conduct, describe and evaluate these investigations. Understands and applies concepts that unify scientific disciplines (Science as Inquiry)

- 1. Plans, designs, conducts, and reports on the conclusions of a basic experiment
 - a. Plans and designs an experiment
 - b. Predicts the results of an experiment
 - c. Conducts an experiment and record data
 - d. Reports through various means, the conclusions of an experiment
- 2. Recognizes that when an experiment is repeated under the same conditions, the results are the same
- 3. Collects, sorts, catalogs, classifies, observes, measures, sketches, interviews, and surveys scientific data
- 4. Constructs models (e.g., a volcano, a paper airplane, a solar system) that illustrate simple concepts and compare those models to what they represent
- 5. Identifies and records changes and patterns of change in a familiar system (e.g., solar system, aquarium, or any simple machine, such as a clock or bicycle)
- 6. Identifies parts of a familiar system, and describes relationships among those parts (e.g., a bicycle, a park, a clock)
- 7. Identifies observable patterns in adult learners' lives, and predicts future events based on those patterns
- 8. Explains how the form or shape of an object or system is frequently related to its use, operation, or function
- 9. Distinguishes between natural objects and objects made by humans

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

- 1. Recognizes that scientific contributions have been made by all kinds of people everywhere in the world
- 2. Describes the results of scientific inquiry in the world (e.g., a timeline of inventions, progression from simple to mechanized tools, understanding weather patterns)
- 3. Recognizes that scientific inquiry has produced much knowledge about the world, that much is still unknown, and that some things will always be unknown
- 4. Explains how asking and answering questions are part of the process of scientific investigation and compare prior knowledge to the results of a scientific investigation
- 5. Identifies occupations that require the application of science and technology
- 6. Identifies which resources are limited and which resources can be extended through recycling and decreased use

- 7. Describes how the application of science may be used to change the quality of life, for better or worse, for people
- 8. Explains how physical environments change due to human activity (e.g., irrigation, dams and levees, offshore drilling)
- 9. Describes populations, resources, and environments (e.g., habitat, ecosystem, food chain), and explain interactions and interdependence among specific populations, resources, and environments
- 10. Identifies and describes how technology (e.g., zipper, paper clips, computers) contributes to solving problems

Indicator C: Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics. Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments (Life Science)

- 1. Describes and explains cause-and-effect relationships in living systems
- 2. Traces the life cycles of various organisms
- 3. Identifies the basic structures and describes the functions [of the basic structures] of plants and animals
- 4. Recognizes that component parts make up the human body systems (e.g., digestive, muscular, skeletal), including major organs (e.g., lungs, heart, skin) within systems
- 5. Recognizes that offspring within families have both similarities and differences
- 6. Identifies living versus non-living components within ecosystems and describes the interaction among the two
- 7. Describes relationships among various organisms in their environment (e.g., predator/prey, parasite/host, food chains and webs)
- 8. Classifies organisms according to common characteristics (e.g., bones, appendages)
- 9. Identifies some characteristics that are common to all individuals of a species/group and recognizes why there are differences and what they are
- 10. Explains that all organisms cause changes, some beneficial and detrimental, in the environments where they live

Indicator D: Understands the nature of matter and energy including their forms, the changes they undergo and their interactions (Physical Science)

- 1. Examines, describes, classifies, measures and compares tangible objects in terms of common physical properties (e.g., length, mass, volume, temperature, size, weight, shape, texture, flexibility, color)
- 2. Creates mixtures (e.g., salt and sand, iron filings and soil) and separates them based on differences in properties
- 3. Recognizes that objects can be made of one or more materials
- 4. Demonstrates that light, heat, motion, magnetism and sound can cause changes
- 5. Identifies the different states of matter and recognizes that matter can change and exist in one or more states
- 6. Recognizes that light travels in a straight line and can be reflected, refracted or absorbed

Indicator E: Understands the composition, formative processes, and history of the Earth, the solar system and the universe (Earth and Space Science)

- 1. Describes the basic Earth materials (rocks, soils, water and gases) and their physical properties
- 2. Identifies the planets and describes their relationship to the Sun
- 3. Recognizes that a major source of the Earth's heat and light is the Sun and describes the motion of the Earth in relation to the Sun, including the concepts of day, night, year, and the seasons
- 4. Identifies the seasons and their characteristics
- 5. Identifies and describes the patterns of movement of objects visible in the sky over time (e.g., seasonal position of the sun, constellations, the moon)
- 6. Identifies major features of Earth's surface (e.g., mountains, rivers, plains, plateaus) and the natural processes and forces that shape the Earth's surface, including weathering, erosion, earthquakes, floods, and volcanic activity that gradually and rapidly shape the Earth's surface
- 7. Describes natural events (e.g., volcanoes, hurricanes, tornadoes, earthquakes), and explains how they affect humans
- 8. Investigates and describes the general characteristics of atmosphere and the fundamental processes of weather
- 9. Collects and records weather data and note how human activities are affected by it
- 10. Describes the water resource, its uses, importance, and cyclic patterns of movement through the environment
- 11. Describes how fossils provide evidence about the plants and animals that lived long ago and the nature of the environment at the time

ABE II

Indicator A: Understands and uses the processes of scientific investigation and scientific ways of knowing. Able to design, conduct, describe and evaluate these investigations. Able to understand and apply concepts that unify scientific disciplines (Science as Inquiry)

- 1. Identifies a question, formulates a hypothesis, controls and manipulates variables, devises experiments, predicts outcomes, compares and analyzes results, and defends conclusions
 - a. Distinguishes between a question and a hypothesis
 - b. Describes the functions of variables in an investigation
 - c. Predicts an outcome based on experimental data
 - d. Draws a conclusion based on a set of experimental data
- 2. Designs a model to illustrate a system (e.g., a mobile of the solar system)
- 3. Organizes and presents data gathered from their own experiences, using appropriate mathematical analyses and graphical representations (e.g., bar graph, line graph, frequency table, Venn diagram)
- 4. Identifies and refines questions from previous investigations
- 5. Recognizes that conclusions are tentative and open to modification as new data are collected
- 6. Analyzes the processes, parts and subsystems of a bicycle, a clock or other mechanical or electrical device
 - a. Identifies the parts of a subsystem within a system
 - b. Describes the functions of a subsystem
 - c. States cause-and-effect relationships among components in mechanical or electrical devices
- 7. Analyzes the reliability of scientific reports from magazines, television or other media, using evidence to support or refute a conclusion drawn from a scientific report

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

- 1. Describes major scientific contributions
- 2. Describes how science and technology are interrelated
- 3. Provides different explanations for a phenomenon; defend and refute the explanations with evidence
- 4. Recognizes how scientific knowledge, thinking processes and skills are used in a great variety of careers
- 5. Develops and uses a systematic approach to describe the risks associated with natural and biological hazards

- 6. Uses scientific findings to propose and evaluate solutions to a human or environmental problem (e.g., water pollution, malnutrition, fire hazards), and modify the solutions to the problem, if necessary
- 7. Evaluates the possible strengths and weaknesses of a given solution to a problem
- 8. Explains how technological solutions have intended benefits and unintended consequences
- 9. Analyzes how the introduction of a new technology has affected human activity (e.g., invention of the telescope, applications of modern telecommunications)

Indicator C: Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics. Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments (Life Science)

- 1. Constructs a simple classification system based on physical characteristics of organisms
- 2. Identifies and differentiates between the basic structures and functions of various cells
- 3. Identifies the main structures of cells, tissues, and organ systems within an organism, and identifies the interrelationships among them
- 4. Identifies the major components of vital body systems and identifies the functions of those systems (e.g., digestion, respiration, reproduction, circulation, excretion, movement, control, coordination)
- 5. Describes organism adaptations or constancy over geologic time
- 6. Describes the role of genes in heredity, and distinguishes between physical characteristics which are, and are not, inherited
- 7. Describes the components of an ecosystem and how living components interact with non-living components. Explains that both components are interdependent within an ecosystem, including the adaptation of plants and animals to their environment

Indicator D: Understands the nature of matter and energy including their forms, the changes they undergo and their interactions (Physical Science)

- 1. Examines, describes, compares, measures, and classifies objects and mixtures of substances based on common physical and chemical properties (e.g., states of matter, mass, volume, electrical charge, density, boiling points, pH, magnetism, solubility)
- 2. Distinguishes between mixtures and compounds
- 3. Identifies various types of energy sources and describes how energy is transferred
- 4. Identifies and predicts what will change and what will remain unchanged when matter experiences an external force or energy change (e.g., boiling a liquid; comparing the force, distance and work involved in simple machines)
- 5. Describes, measures and calculates characteristics (e.g., speed, distance, mass, force, gravity) of moving objects and their interactions (e.g., force, velocity, acceleration, potential energy and kinetic energy) within a system

Indicator E: Understands the composition, formative processes, and history of the Earth, the solar system and the universe (Earth and Space Science)

- 1. Distinguishes between revolution and rotation
- 2. Describes common objects in the solar system and explains how they are related
- 3. Describes the layers of the Earth and their compositions
- 4. Explains how rocks, minerals and soil are formed
- 5. Describes how life and environmental conditions have changed over time (geologic and recent)
- 6. Identifies Earth processes and compares the processes that affect the Earth today with those that occurred in the past
- 7. Explains how water is cycled in nature and identifies the distribution of water on Earth, underground and in the atmosphere
- 8. Describes currents, waves, tides and ocean floor features
- 9. Describes the basic characteristics of the Earth's bodies of fresh water and salt water
- 10. Describes the difference between weather and climate
- 11. Defines basic terms associated with weather systems including fronts, pressure systems and types of clouds
- 12. Describes the properties and composition of the layers of the atmosphere
- 13. Explains how technology has impacted both Earth and space science

ABE III

Indicator A: Understands and uses the processes of scientific investigation and scientific ways of knowing. Able to design, conduct, describe and evaluate these investigations. Able to understand and apply concepts that unify scientific disciplines (Science as Inquiry)

- 1. Formulates questions directed toward objects and phenomena that can be described
- 2. Designs and executes scientific investigations, testing only one variable at a time using a control
- 3. Presents information in a formal laboratory report including gathering, recording, organizing data accurately and making correct use of histograms, stem and leaf plots, scatter plots, circle graphs, flow charts, line graphs, bar graphs, charts, etc
- 4. Interprets data; establishes relationships based on evidence and logical argument; draws conclusions/explanations
- 5. Proposes, analyzes, and critiques alternative explanations of phenomena
- 6. Defines the terms: hypothesis, model, principle, law, theory, and paradigm
- 7. Explains how scientific theory, hypothesis generation, and experimentation are related
- 8. Recognizes that although all scientific ideas are tentative and subject to change, and theories may be disagreed upon where research is active, for most major ideas in science, there is much experimental and observational confirmation

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

- 1. Compares and contrasts the goals of science and technology
- 2. Explains how scientific knowledge, thinking processes and skills are used to solve problems in a variety of careers
- 3. Describes a technological discovery that has influenced science and a scientific discovery that has influenced technology. Determines scientific processes involved in technological advancement
- 4. Describes and compares the intended benefits and unintended consequences and/or risks of scientific and technologic innovations on society and the quality of life
- 5. Describes how technology affects the definition of, access to, and use of resources and the effects of population on those resources
- 6. Describes how human activities can induce hazards through resource acquisition, urban growth, land use decisions, and waste disposal
- 7. Analyzes the risk factors associated with natural, biological, chemical, social (occupational safety and transportation), and personal (smoking, diet, and drugs) hazards
- 8. Evaluates the merit of a proposed solution to a human or environmental problem
- 9. Gives an example that demonstrates that scientists have ethical codes that extend to potential risks to human subjects, property, and communities
- 10. Gives an example of the interplay between society and the research that gets funded

Indicator C: Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics. Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments (Life Science)

- 1. Identifies the characteristics and structure of living things
- 2. Constructs classification systems for grouping organisms and identify organisms based on existing classification systems
- 3. Compares and contrasts the basic structures, components, and functions of different types of cells, tissues, and organs
- 4. Identifies the systems for digestion, respiration, reproduction, circulation, excretion, movement, control, and coordination in the human body and how those systems work together
- 5. Describes the theory of evolution; able to describe species' diversity and adaptation, variation, and extinction over geologic time
- 6. Describes the role of chromosomes and genes in heredity
- 7. Distinguishes between dominant and recessive traits and describe information that is carried in a gene
- 8. Identifies the structure and function of systems (e.g., respiratory, digestive, circulatory, nervous), and the function of feedback and equilibrium
- 9. Explains and models the interaction and interdependence of living and non-living components within ecosystems, including the adaptation of plants and animals to their environment, food webs, resources, and energy

Indicator D: Understands the nature of matter and energy including their forms, the changes they undergo and their interactions (Physical Science)

- 1. Examines, describes, compares, measures, and classifies objects and mixtures of substances based on common physical and chemical properties (e.g., states of matter, mass, volume, density, electrical charge, freezing and boiling points, pH, magnetism, solubility)
- 2. Classifies and describes matter in terms of elements, compounds, mixtures, atoms, and molecules
- 3. Describes how energy is a property of many substances, occurs in many forms (heat, light, electrical, mechanical, sound, nuclear, and chemical, either potential or kinetic), and can be transferred in many ways
- 4. Defines the law of conservation of energy
- 5. Identifies and predicts the properties of matter that will change or will remain unchanged when matter experiences an external force or energy change (e.g., changes of state due to heating and cooling, heat absorption and release when chemicals combine, comparing the force, distance and work involved in simple machines)
- 6. Describes, measures, and calculates quantities before and after a chemical or physical change within a system and uses that data to support the concept of conservation of mass within a closed system
- 7. Describes, measures and calculates characteristics (e.g., speed, distance, mass, force, gravity) of moving objects and their interactions (e.g., force, velocity, acceleration, potential energy, kinetic energy) within a system using Newton's laws of motion

Indicator E: Understands the composition, formative processes, and history of the Earth, the solar system and the universe (Earth and Space Science)

- 1. Describes and models the motion of the Earth in relation to the sun, including the concepts of day, night, season, and year
- 2. Describes common objects in the universe and explains their relationships including the concepts of multiple star systems, star clusters, galaxies, sun, moon, eclipses, planets, asteroids, comets, and gravity
- 3. Describes the composition (including the formation of minerals, rocks, and soil) and the structure of the Earth (including landforms, oceans, and lithospheric plates); explains the processes involved in the formation of the Earth's structures
- 4. Explains how fossils are formed and provides evidence of how life and environmental conditions have changed
- 5. Explains how Earth processes seen today, including erosion, movement of lithospheric plates, and changes in atmospheric composition, are similar to those that occurred in the past
- 6. Describes the distribution and circulation of the world's water through ocean currents, glaciers, rivers, ground water, and atmosphere
- 7. Describes the composition and physical characteristics (including currents, waves, tides, and features of the ocean floor) of the Earth's bodies of water

- 8. Describes the composition, properties, and structures of the atmosphere, such as the range and distribution of temperature and pressure in the troposphere
- 9. Observes, analyzes, and records weather patterns and data, including temperature, cloud types, humidity, and dew point over a period of time
- 10. Explains how technology has impacted both earth and space science by describing some technological advances that have impacted both

ASE I/GED

Indicator A: Understands and uses the processes of scientific investigation and scientific ways of knowing. Able to design, conduct, describe and evaluate these investigations. Able to understand and apply concepts that unify scientific disciplines (Science as Inquiry)

- 1. Proposes solutions to practical and theoretical problems based on evaluating information gained from scientific investigations
- 2. Analyzes and evaluates the validity of conclusions based on scientific studies
- 3. Explains the concept of equilibrium and illustrates the relationship of form to function within natural and designed systems
- 4. Explains why keeping accurate and detailed records is important

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

- 1. Describes how the factors of technology, personalities, world events and societal views can affect the development and acceptance of scientific thought
- 2. Explains how an accepted idea could be challenged by scientific innovation
- 3. Illustrates how an invention or discovery could impact further scientific thought
- 4. Explains how peer review, reporting of methods and outcomes of investigations, and accepting criticism are important to the ethical traditions of science
- 5. Applies scientific thought processes of skepticism, objectivity and logic to seek a solution to a personal or social/environmental issue
- 6. Illustrates how increasing human populations affect natural resources and environmental pollution
- 7. Identifies how technology can affect personal growth using two illustrations
- 8. Lists three factors that can affect population quality, size, growth, or stability, and Identifies the effects of each factor

Indicator C: Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics. Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments (Life Science)

- 1. Explains the processes of photosynthesis and respiration in the interdependency of plants and animals
- 2. Compares the purpose and process of mitosis with the purpose and process of meiosis
- 3. Describes how energy is used in maintenance, repair, growth and development of cells
- 4. Predicts how change in an environmental factor can affect the success or failure of a population to survive
- 5. Describes how a single-celled organism carries out the function of each of the systems found in multi-celled organisms
- 6. Describes the physiology of each system in multi-celled organisms and how each relates to homeostasis
- 7. Identifies the relationship of DNA, genes and chromosomes and explain how a mutation affects this relationship

Indicator D: Understands the nature of matter and energy including their forms, the changes they undergo and their interactions (Physical Science)

- 1. Explains how the sum of energy and matter in systems remains the same despite transference of energy and change in matter
- 2. Determines physical and chemical properties of a substance through observation, experimentation and measurement
- 3. Uses the periodic table to predict the properties of elements and compounds
- 4. Identifies and measures qualitative and quantitative relationships associated with energy
- 5. Uses the law of conservation of energy to explain energy changes in chemical reactions
- 6. Differentiates among elements, atoms and compounds and their relationship to each other
- 7. Relates equilibrium in Physical Science to homeostasis in Life Science

Indicator E: Understands the composition, formative processes, and history of the Earth, the solar system and the universe (Earth and Space Science)

- 1. Suggests ways in which the following events affect living organisms: floods, droughts, earthquakes, heat waves, storms, sunspots, novas
- 2. Explains the principles of hydrology, including surface and ground water flows, aquifers, percolation, desalinization and sources of water contamination and pollution
- 3. Uses the theory of plate tectonics to explain the relationship among volcanoes, earthquakes, mid-ocean ridges and deep sea trenches
- 4. Describes how these forces shape the Earth: glaciation, landslides, volcanoes, earthquakes, and wind and water erosion
- 5. Differentiates among the theories of the origin of: the universe (Big Bang Theory), the solar system (nebular dust and gas), and life forms (evolution and creation)
- 6. Illustrates the Earth's tilt, rotation and revolution and their effects on the seasons and the length of days

ASE II

Indicator A: Understands and uses the processes of scientific investigation and scientific ways of knowing. Able to design, conduct, describe and evaluate these investigations. Able to understand and apply concepts that unify scientific disciplines (Science as Inquiry)

- 1. Designs and conducts an investigation of a scientific problem, and reports results to peers, teachers, and others
- 2. Analyzes a scientific presentation by weighing the evidence and examining the logic in order to reach a decision to the reliability of the results
- 3. Predicts the effects of various factors on the equilibrium of a system
- 4. Analyzes an argument by reviewing current scientific understanding, weighing the evidence and examining the logic so as to determining the validity of the argument

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

- 1. Chooses a major invention or discovery of the past and illustrates how that development affected society and further scientific developments
- 2. Traces the development of a selected invention, theory or discovery from its inception to modern day
- 3. Proposes and tests a solution to an existing social or personal problem
- 4. Designs a product to meet a personal or societal need; tests the product and evaluates the test results
- 5. Differentiates among sudden disastrous natural occurrences and slower progressive natural hazards and their effects on human populations
- 6. Suggests several possible ways to avoid the effects of natural disasters on human populations
- 7. Identifies the basic processes of natural ecosystems, and explains how these processes affect and are affected by humans

Indicator C: Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics. Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments (Life Science)

- 1. Explains how exposure to certain factors (e.g., sunlight, ozone, drugs, nitrates) may increase the rate of mutation and cause variances in human diversity
- 2. Describes how mutations contribute to genetic diversity
- 3. Using scientific evidence, illustrates that descent from common ancestors produced today's diversity of organisms
- 4. Describes how an environmental change could affect various species within an ecosystem

Indicator D: Understands the nature of matter and energy including their forms, the changes they undergo and their interactions (Physical Science)

- 1. Demonstrates the use of conceptual models in science (e.g., graphs, diagrams, formulae, etc.)
- 2. Uses the universal laws of gravitation to predict how gravity force changes with a change of distance and/or mass
- 3. Uses the 1st Law of Thermodynamics to explain the energy changes in a physical system
- 4. Describes a sequence of events that illustrates the 2nd Law of Thermodynamics
- 5. Differentiates between gravitational and electromagnetic forces

Indicator E: Understands the composition, formative processes, and history of the Earth, the solar system and the universe (Earth and Space Science)

- 1. Discusses the costs, benefits and consequences of natural resource exploration, development and consumption
- 2. Analyzes energy in the Earth's system, including radioactive decay, geo-chemical cycles, gravitational energy, internal and external sources of energy, weather and climate
- 3. Describes the factors that influence the reuse, recycling and conservation of water
- 4. Analyzes how weather is influenced by natural and artificial features and by natural and artificial dynamic processes

Science Performance Standards

Indicator A: Understands and uses the processes of scientific investigation and ways of knowing.

Able to design, conduct, describe and evaluate these investigations. Understands and applies concepts that unify scientific disciplines (Science as Inquiry)

Pre-Literacy

Beginning

- Identifies safe procedures in all science activities
- Organizes (e.g., sorts, classifies, sequences) objects, organisms, and events by different characteristics

Approaching

- Identifies safe procedures in all science activities
- Organizes (e.g., sorts, classifies, sequences) objects, organisms, and events by different characteristics
- Formulates basic questions about objects, organizations, events and relationships in a natural and designed world
- States simple hypothesis about cause-and-effect relationships in the environment
- Performs simple measures
- Observes simple systems (e.g., ant farm, plant terrarium, aquarium)

Met

- Identifies and uses safe procedures in all science activities
- Organizes (e.g., sorts, classifies, sequences) objects, organisms, and events by different characteristics
- Formulates basic questions about objects, organizations, events and relationships in a natural and designed world
- States simple hypothesis about cause-and-effect relationships in the environment
- Performs simple measures
- Performs simple comparisons using measurements
- Observes simple systems (e.g., ant farm, plant terrarium, aquarium)
- Describes simple systems
- States examples of scientific inquiry familiar from previous life experience

Exceeds

Is able to correctly teach the following concepts to others:

- Identifies and uses safe procedures in all science activities
- Organizes (e.g., sorts, classifies, sequences) objects, organisms, and events by different characteristics
- Performs simple measures
- Performs simple comparisons using measurements

Indicator A: Understands and uses the processes of scientific investigation and ways of knowing. Able to design, conduct, describe and evaluate these investigations. Understands and applies concepts that unify scientific disciplines (Science as Inquiry)

ABE I

Beginning

- Plans and designs an experiment
- Predicts the results of an experiment
- Observes, collects, sketches, and sorts scientific data
- Constructs models (e.g., a volcano, a paper airplane, a solar system) that illustrate simple concepts
- Identifies parts of a familiar system
- Identifies changes and patterns of change in a familiar system (e.g., solar system, aquarium, or any simple machine, such as a clock or bicycle)
- Identifies observable patterns in adult learners' lives, and predicts future events based on those patterns
- Distinguishes between natural objects and objects made by humans

Approaching

- Plans and designs an experiment
- Predicts the results of an experiment
- Conducts an experiment and records data
- Observes, collects, sketches, and sorts scientific data
- Catalogs, classifies, and measures scientific data
- Constructs models (e.g., a volcano, a paper airplane, a solar system) that illustrate simple concepts
- Identifies parts of a familiar system
- Identifies changes and patterns of change in a familiar system (e.g., solar system, aquarium, or any simple machine, such as a clock or bicycle)
- Identifies observable patterns in adult learners' lives, and predicts future events based on those patterns
- Distinguishes between natural objects and objects made by humans
- Records changes and patterns of change in a familiar system (e.g., solar system, aquarium, or any simple machine, such as a clock or bicycle)
- Explains how the form or shape of an object or system is frequently related to its use, operation, or function

Met

- Plans and designs an experiment
- Predicts the results of an experiment
- Conducts an experiment and records data
- Observes, collects, sketches, and sorts scientific data
- Catalogs, classifies, and measures scientific data
- Reports through various means, the conclusions of an experiment
- Recognizes that when an experiment is repeated under the same conditions, the results are the same
- Interviews and surveys scientific data
- Constructs models (e.g., a volcano, a paper airplane, a solar system) that illustrate simple concepts
- Compares models to what they represent
- Identifies parts of a familiar system
- Identifies changes and patterns of change in a familiar system (e.g., solar system, aquarium, or any simple machine, such as a clock or bicycle)
- Describe the relationship of parts of a familiar system
- Identifies observable patterns in adult learners' lives, and predicts future events based on those patterns
- Distinguishes between natural objects and objects made by humans
- Records changes and patterns of change in a familiar system at regular intervals
- Explains how the form or shape of an object or system is frequently related to its use, operation, or function

Exceeds

- Plans and designs an experiment
- Predicts the results of an experiment
- Conducts an experiment and records data
- Observes, collects, sketches, and sorts scientific data
- Catalogs, classifies, and measures scientific data
- Reports through various means, the conclusions of an experiment
- Recognizes that when an experiment is repeated under the same conditions, the results are the same
- Interviews and surveys scientific data
- Constructs models (e.g., a paper clock) that illustrate more complex concepts
- Compares models to what they represent
- Identifies parts of a familiar system
- Identifies changes and patterns of change in a more complex familiar system (e.g., gasoline engine)
- Describe the relationship of parts of a familiar system
- Identifies observable patterns in adult learners' lives, and predicts future events based on those patterns
- Distinguishes between natural objects and objects made by humans
- Records changes and patterns of change in a familiar system at regular intervals
- Explains how the form or shape of an object or system is frequently related to its use, operation, or function

Indicator A: Understands and uses the processes of scientific investigation and ways of knowing. Able to design, conduct, describe and evaluate these investigations. Understands and applies concepts that unify scientific disciplines (Science as Inquiry)

ABE II

Beginning

- Identifies a question, formulates a hypothesis, devises experiments, and predicts outcomes
- Identifies the parts of a subsystem within a system

Approaching

- Identifies a question, formulates a hypothesis, devises experiments, and predicts outcomes
- Controls and manipulates the variables of an experiment, describes the function of variables, and distinguishes between a question and a hypothesis
- Identifies and refines questions from previous investigations
- Identifies the parts of a subsystem within a system
- Designs a model to illustrate a system (e.g., a mobile of the solar system)
- Describes the functions of a subsystem

Met

- Identifies a question, formulates a hypothesis, devises experiments, and predicts outcomes
- Controls and manipulates the variables of an experiment, describes the function of variables, and distinguishes between a question and a hypothesis
- Compares and analyzes the results of an experiment, draws a conclusion, and defends conclusions
- Organizes and presents data gathered from their own experiences, using appropriate mathematical analyses and graphical representations (e.g., bar graph, line graph, frequency table, Venn diagram)
- Recognizes that conclusions are tentative and open to modification as new data are collected
- Identifies and refines questions from previous investigations
- Analyzes the reliability of scientific reports from magazines, television or other media, using evidence to support
 or refute a conclusion drawn from a scientific report
- Identifies the parts of a subsystem within a system
- Designs a model to illustrate a system (e.g., a mobile of the solar system)
- Describes the functions of a subsystem
- States cause-and-effect relationships among components in mechanical or electrical devices

Exceeds

Is able to perform all Met performance standards at higher levels of complexity:

- Identifies a question, formulates a hypothesis, devises experiments, and predicts outcomes
- Controls and manipulates the variables of an experiment, describes the function of variables, and distinguishes between a question and a hypothesis
- Compares and analyzes the results of an experiment, draws a conclusion, and defends conclusions
- Organizes and presents data gathered from their own experiences, using appropriate mathematical analyses and graphical representations (e.g., bar graph, line graph, frequency table, Venn diagram)
- Recognizes that conclusions are tentative and open to modification as new data are collected
- Identifies and refines questions from previous investigations
- Analyzes the reliability of scientific reports from magazines, television or other media, using evidence to support or refute a conclusion drawn from a scientific report
- Identifies the parts of a subsystem within a system
- Designs a model to illustrate a system (e.g., a mobile of the solar system including asteroid belt and satellites of other planets)
- Describes the functions of a subsystem
- States cause-and-effect relationships among components in mechanical or electrical devices

Indicator A: Understands and uses the processes of scientific investigation and ways of knowing. Able to design, conduct, describe and evaluate these investigations. Understands and applies concepts that unify scientific disciplines (Science as Inquiry)

ABE III

Beginning

- Formulates questions directed toward objects and phenomena that can be described
- Designs and executes scientific investigations
- Defines the terms: hypothesis, model

Approaching

- Formulates questions directed toward objects and phenomena that can be described
- Designs and executes scientific investigations
- Tests only one variable at a time using a control
- Defines the terms: hypothesis, model, principle, law
- Explains how scientific theory, hypothesis generation, and experimentation are related

Met

- Formulates questions directed toward objects and phenomena that can be described
- Designs and executes scientific investigations
- Tests only one variable at a time using a control
- Presents information in a formal laboratory report including gathering, recording, organizing data accurately and making correct use of histograms, stem and leaf plots, scatter plots, circle graphs, flow charts, line graphs, bar graphs, charts, etc
- Interprets data; establishes relationships based on evidence and logical argument; draws conclusions/explanations
- Proposes, analyzes, and critiques alternative explanations of phenomena
- Defines the terms: hypothesis, model, principle, law, theory, and paradigm
- Explains how scientific theory, hypothesis generation, and experimentation are related
- Recognizes that although all scientific ideas are tentative and subject to change, and theories may be disagreed
 upon where research is active, for most major ideas in science, there is much experimental and observational
 confirmation

Exceeds

- Formulates questions directed toward objects and phenomena that can be described
- Designs and executes scientific investigations
- Tests only one variable at a time using a control
- Presents information in a formal laboratory report including gathering, recording, organizing data accurately and making correct use of histograms, stem and leaf plots, scatter plots, circle graphs, flow charts, line graphs, bar graphs, charts, etc
- Interprets data; establishes relationships based on evidence and logical argument; draws conclusions/explanations
- Proposes, analyzes, and critiques alternative explanations of phenomena
- Defines the terms: hypothesis, model, principle, law, theory, and paradigm
- Explains how scientific theory, hypothesis generation, and experimentation are related
- Recognizes that although all scientific ideas are tentative and subject to change, and theories may be disagreed
 upon where research is active, for most major ideas in science, there is much experimental and observational
 confirmation

Indicator A: Understands and uses the processes of scientific investigation and ways of knowing. Able to design, conduct, describe and evaluate these investigations. Understands and applies concepts that unify scientific disciplines (Science as Inquiry)

ASE I

Beginning

Proposes solutions to practical and theoretical problems based on evaluating information gained from scientific investigations.

Approaching

- Proposes solutions to practical and theoretical problems based on evaluating information gained from scientific investigations
- Explains why keeping accurate and detailed records is important

Met

- Proposes solutions to practical and theoretical problems based on evaluating information gained from scientific investigations
- Explains why keeping accurate and detailed records is important
- Analyzes and evaluates the validity of conclusions based on scientific studies
- Explains the concept of equilibrium and illustrates the relationship of form to function within natural and designed systems

Exceeds

- Proposes solutions to practical and theoretical problems based on evaluating information gained from scientific investigations
- Explains why keeping accurate and detailed records is important
- Analyzes and evaluates the validity of conclusions based on scientific studies
- Explains the concept of equilibrium and illustrates the relationship of form to function within natural and designed systems

Indicator A: Understands and uses the processes of scientific investigation and ways of knowing. Able to design, conduct, describe and evaluate these investigations. Understands and applies concepts that unify scientific disciplines (Science as Inquiry)

ASE II

Beginning

Designs and conducts an investigation of a scientific problem

Approaching

- Designs and conducts an investigation of a scientific problem
- Predicts the effects of various factors on the equilibrium of the system

Met

- Designs and conducts an investigation of a scientific problem
- Predicts the effects of various factors on the equilibrium of the system
- Reports results of investigations to peers, teachers, and others
- Analyzes a scientific presentation by weighing the evidence and examining the logic in order to reach a decision to the reliability of the results
- Analyzes an argument by reviewing current scientific understanding, weighing the evidence and examining the logic so as to determining the validity of the argument

Exceeds

- Designs and conducts an investigation of a scientific problem
- Predicts the effects of various factors on the equilibrium of the system
- Reports results of investigations to peers, teachers, and others
- Analyzes a scientific presentation by weighing the evidence and examining the logic in order to reach a decision to the reliability of the results
- Analyzes an argument by reviewing current scientific understanding, weighing the evidence and examining the logic so as to determining the validity of the argument

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

Pre-Literacy

Beginning

- Recognizes that some people can and do participate in science and technology
- Identifies one career that applies science and technology
- Identifies one way that scientific technology affects our daily lives, jobs and recreation
- Sometimes demonstrates the proper use of simple technology (e.g., scales, balances, magnifiers, computers)

Approaching

- Recognizes that many people can and do participate in science and technology
- Identifies two or three careers that apply science and technology
- Identifies two or three ways that scientific technology affects our daily lives, jobs and recreation
- Often demonstrates the proper use of simple technology (e.g., scales, balances, magnifiers, computers)

Met

- Recognizes that all people can and do participate in science and technology
- Identifies many careers that apply science and technology
- Identifies many ways that scientific technology affects our daily lives, jobs and recreation
- Usually demonstrates the proper use of simple technology (e.g., scales, balances, magnifiers, computers)

Exceeds

- Recognizes that all people can and do participate in science and technology
- Identifies many careers that apply science and technology
- Identifies many ways that scientific technology affects our daily lives, jobs and recreation
- Always demonstrates the proper use of simple technology (e.g., scales, balances, magnifiers, computers)

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

ABE I

Beginning

- Recognizes that scientific contributions have been made by many kinds of people
- Describes the results of one scientific inquiry in the world (e.g., a timeline of inventions, progression from simple to mechanized tools, understanding weather patterns)
- Recognizes that scientific inquiry has produced much knowledge about the world
- Explains how asking questions is part of the process of scientific investigation
- Identifies one occupation that requires the application of science and technology
- Identifies which resources are limited
- Describes how one application of science may be used to change the quality of life, for better or worse, for people
- Explains how one physical environment may change due to human activity (e.g., irrigation, dams and levees, offshore drilling)
- Describes populations, resources, and environments (e.g., habitat, ecosystem, food chain), and explain
- Identifies and describes how one example of technology (e.g., zipper, paper clips, computers) contributes to solving problems

Approaching

- Recognizes that scientific contributions have been made by all kinds of people
- Describes the results of two scientific inquiries in the world (e.g., a timeline of inventions, progression from simple to mechanized tools, understanding weather patterns)
- Recognizes that scientific inquiry has produced much knowledge about the world, that much is still unknown
- Explains how asking and answering questions are part of the process of scientific investigation
- Identifies two or three occupations that require the application of science and technology
- Identifies which resources are limited and which resources can be extended through decreased use
- Describes how two applications of science may be used to change the quality of life, for better or worse, for people
- Explains how two physical environments may change due to human activity (e.g., irrigation, dams and levees, offshore drilling)
- Describes populations, resources, and environments (e.g., habitat, ecosystem, food chain), and explain interactions among specific populations, resources, and environments
- Identifies and describes how two examples of technology (e.g., zipper, paper clips, computers) contributes to solving problems

Met

- Recognizes that scientific contributions have been made by all kinds of people everywhere in the world
- Describes the results of several scientific inquiries in the world (e.g., a timeline of inventions, progression from simple to mechanized tools, understanding weather patterns)
- Recognizes that scientific inquiry has produced much knowledge about the world, that much is still unknown, and that some things will always be unknown
- Explains how asking and answering questions are part of the process of scientific investigation and compares prior knowledge to the results of a scientific investigation
- Identifies many occupations that require the application of science and technology
- Identifies which resources are limited and which resources can be extended through recycling and decreased use
- Describes how the application of science may be used to change the quality of life, for better or worse, for people
- Explains how physical environments change due to human activity (e.g., irrigation, dams and levees, offshore drilling)
- Describes populations, resources, and environments (e.g., habitat, ecosystem, food chain), and explain interactions and interdependence among specific populations, resources, and environments
- Identifies and describes how technology (e.g., zipper, paper clips, computers) contributes to solving problem s

ABE I (Science and Technology – Past, Present and Future)

Exceeds

- Recognizes that scientific contributions have been made by all kinds of people everywhere in the world
- Describes the results of several scientific inquiries in the world (e.g., a timeline of inventions, progression from simple to mechanized tools, understanding weather patterns)
- Recognizes that scientific inquiry has produced much knowledge about the world, that much is still unknown, and that some things will always be unknown
- Explains how asking and answering questions are part of the process of scientific investigation and compares prior knowledge to the results of a scientific investigation
- Identifies many occupations that require the application of science and technology
- Identifies which resources are limited and which resources can be extended through recycling, decreased use, and reuse
- Describes how the application of science may be used to change the quality of life, for better or worse, for people
- Explains how physical environments change due to human activity (e.g., irrigation, dams and levees, offshore drilling)
- Describes populations, resources, and environments (e.g., habitat, ecosystem, food chain), and explain interactions and interdependence among specific populations, resources, and environments
- Identifies and describes how technology (e.g., zipper, paper clips, computers) contributes to solving problems

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

ABE II

Beginning:

- Describes one major scientific contribution
- Describes one example of how science and technology are interrelated
- Provides one different explanation for a phenomenon; defends the explanations with evidence
- Recognizes how scientific knowledge, thinking processes and skills are used in a career outside of science
- Develops a systematic approach to describe the risks associated with natural and biological hazards
- Uses scientific findings to propose and evaluate one solution to a human or environmental problem (e.g., water pollution, malnutrition, fire hazards
- Evaluates one possible strength and weakness of a given solution to a problem
- Explains how one technological solution has intended benefits and unintended consequences
- Analyzes how the introduction of one new technology has affected human activity (e.g., invention of the telescope, applications of modern telecommunications)

Approaching

- Describes two major scientific contributions
- Describes two examples of how science and technology are interrelated
- Provides different explanations for a phenomenon; defends explanations with evidence
- Recognizes how scientific knowledge, thinking processes and skills are used in several careers outside of science
- Develops and uses a systematic approach to describe the risks associated with some natural and biological hazards
- Uses scientific findings to propose and evaluate solutions to one human or environmental problem (e.g., water pollution, malnutrition, fire hazards), and modify the solutions to the problem, if necessary
- Evaluates two possible strengths and/or weaknesses of a given solution to a problem
- Explains how two technological solutions have intended benefits and unintended consequences
- Analyzes how the introduction of two or three new technologies has affected human activity (e.g., invention of the telescope, applications of modern telecommunications)

Met

- Describes many major scientific contributions
- Describes how science and technology are interrelated using many examples
- Provides different explanations for a phenomenon; defends and refutes the explanations with evidence
- Recognizes how scientific knowledge, thinking processes and skills are used in a great variety of careers
- Develops and uses a systematic approach to describe the risks associated with many natural and biological hazards
- Uses scientific findings to propose and evaluate solutions to several human or environmental problems (e.g., water pollution, malnutrition, fire hazards), and modify the solutions to the problems, if necessary
- Evaluates the possible strengths and weaknesses of a given solution to a problem
- Explains how many technological solutions have intended benefits and unintended consequences
- Analyzes how the introductions of many new technologies have affected human activity (e.g., invention of the telescope, applications of modern telecommunications)

ABE II (Science and Technology – Past, Present and Future)

Exceeds

Is able to perform all Met performance standards at higher levels of complexity:

- Describes many major scientific contributions
- Describes how science and technology are interrelated using many examples
- Provides different explanations for a phenomenon; defends and refutes the explanations with evidence
- Recognizes how scientific knowledge, thinking processes and skills are used in a great variety of careers
- Develops and uses a systematic approach to describe the risks associated with many natural and biological hazards
- Uses scientific findings to propose and evaluate solutions to several human or environmental problems (e.g., water pollution, malnutrition, fire hazards), and modify the solutions to the problems, if necessary
- Evaluates the possible strengths and weaknesses of a given solution to a problem
- Explains how many technological solutions have intended benefits and unintended consequences
- Analyzes how the introductions of many new technologies have affected human activity (e.g., invention of the telescope, applications of modern telecommunications)

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

ABE III

Beginning

- Compares and contrasts one goal of science and technology
- Explains how scientific knowledge, thinking processes and skills are used to solve problems in several careers
- Describes a technological discovery that has influenced science
- Describes and compares the intended benefits and unintended consequences and/or risks of one scientific and technologic innovation on society and the quality of life
- Describes how one example of technology affects the definition of, access to, and use of resources and the effects of population on those resources
- Describes how human activities can induce hazards through resource acquisition, urban growth
- Analyzes the risk factors associated with natural, biological, and personal (smoking, diet, and drugs) hazards
- Evaluates one merit of a proposed solution to a human or environmental problem
- Gives an example that demonstrates that scientists have ethical codes that extend to potential risks to human subjects, property

Approaching

- Compares and contrasts two goals of science and technology
- Explains how scientific knowledge, thinking processes and skills are used to solve problems in many careers
- Describes a technological discovery that has influenced science and a scientific discovery that has influenced technology.
- Describes and compares the intended benefits and unintended consequences and/or risks of two scientific and technologic innovations on society and the quality of life
- Describes how two examples of technology affect the definition of, access to, and use of resources and the effects of population on those resources
- Describes how human activities can induce hazards through resource acquisition, urban growth, land use decisions
- Analyzes the risk factors associated with natural, biological, chemical, and personal (smoking, diet, and drugs)
 hazards
- Evaluates one merit and one disadvantage of a proposed solution to a human or environmental problem
- Gives an example that demonstrates that scientists have ethical codes that extend to potential risks to human subjects, property, or communities

■ Met

- Compares and contrasts the goals of science and technology
- Explains how scientific knowledge, thinking processes and skills are used to solve problems in a variety of careers
- Describes a technological discovery that has influenced science and a scientific discovery that has influenced technology. Determines scientific processes involved in technological advancement
- Describes and compares the intended benefits and unintended consequences and/or risks of many scientific and technologic innovations on society and the quality of life
- Describes how many examples of technology affect the definition of, access to, and use of resources and the effects of population on those resources
- Describes how human activities can induce hazards through resource acquisition, urban growth, land use decisions, and waste disposal
- Analyzes the risk factors associated with natural, biological, chemical, social (occupational safety and transportation), and personal hazards
- Evaluates the merits of a proposed solution to a human or environmental problem
- Gives an example that demonstrates that scientists have ethical codes that extend to potential risks to human subjects, property, and communities

ABE III (Science and Technology – Past, Present and Future)

Exceeds

Is able to perform all Met performance standards at higher levels of complexity:

- Compares and contrasts the goals of science and technology
- Explains how scientific knowledge, thinking processes and skills are used to solve problems in a variety of careers
- Describes a technological discovery that has influenced science and a scientific discovery that has influenced technology. Determines scientific processes involved in technological advancement
- Describes and compares the intended benefits and unintended consequences and/or risks of many scientific and technologic innovations on society and the quality of life
- Describes how many examples of technology affect the definition of, access to, and use of resources and the
 effects of population on those resources
- Describes how human activities can induce hazards through resource acquisition, urban growth, land use decisions, and waste disposal
- Analyzes the risk factors associated with natural, biological, chemical, social (occupational safety and transportation), and personal hazards
- Evaluates the merits of a proposed solution to a human or environmental problem
- Gives an example that demonstrates that scientists have ethical codes that extend to potential risks to human subjects, property, and communities

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

ASE I

Beginning

- Describes how the factor of technology can affect the development and acceptance of scientific thought
- Explains how an accepted idea could be challenged by scientific innovation giving one example
- Illustrates how an invention or discovery could impact further scientific thought giving one example
- Explains how peer review is important to the ethical traditions of science
- Applies scientific thought processes of skepticism to seek a solution to a personal or social/environmental issue
- Illustrates how increasing human populations affect natural resources and environmental pollution giving one example
- Identifies how technology can affect personal growth using one illustration
- Lists one factor that can affect population quality, size, growth, or stability, and
- identifies the effects of the factor

Approaching

- Describes how the factors of technology and societal views can affect the development and acceptance of scientific thought
- Explains how an accepted idea could be challenged by scientific innovation giving two examples
- Illustrates how an invention or discovery could impact further scientific thought giving two examples
- Explains how peer review and reporting of methods and outcomes of investigations are important to the ethical traditions of science
- Applies scientific thought processes of skepticism and objectivity to seek a solution to a personal or social/environmental issue
- Illustrates how increasing human populations affect natural resources and environmental pollution giving two examples
- Identifies how technology can affect personal growth using two illustrations
- Lists two factors that can affect population quality, size, growth, or stability, and identifies the effects of each factor

Met

- Describes how the factors of technology, personalities, world events and societal views can affect the development and acceptance of scientific thought
- Explains how an accepted idea could be challenged by scientific innovation giving more than two examples
- Illustrates how an invention or discovery could impact further scientific thought giving multiple examples
- Explains how peer review, reporting of methods and outcomes of investigations, and accepting criticism are important to the ethical traditions of science
- Applies scientific thought processes of skepticism, objectivity and logic to seek a solution to a personal or social/environmental issue
- Illustrates how increasing human populations affect natural resources and environmental pollution giving multiple examples
- Identifies how technology can affect personal growth using more than two illustrations
- Lists three factors that can affect population quality, size, growth, or stability, and
- identifies the effects of each factor

ASE I (Science and Technology – Past, Present and Future)

Exceeds

Is able to perform all Met performance standards at higher levels of complexity:

- Describes how the factors of technology, personalities, world events and societal views can affect the development and acceptance of scientific thought
- Explains how an accepted idea could be challenged by scientific innovation giving more than two examples
- Illustrates how an invention or discovery could impact further scientific thought giving multiple examples
- Explains how peer review, reporting of methods and outcomes of investigations, and accepting criticism are important to the ethical traditions of science
- Applies scientific thought processes of skepticism, objectivity and logic to seek a solution to a personal or social/environmental issue
- Illustrates how increasing human populations affect natural resources and environmental pollution giving multiple examples
- Identifies how technology can affect personal growth using more than two illustrations
- Lists three factors that can affect population quality, size, growth, or stability, and
- identifies the effects of each factor

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and future (Science and Technology – Past, Present and Future)

ASE II

Beginning

- Chooses a major invention or discovery of the past and illustrates one way that development affected society and further scientific developments
- Traces the development of one selected invention, theory or discovery from its inception to modern day
- Proposes a solution to an existing personal problem
- Designs a product to meet a personal or societal need
- Suggests several possible ways to avoid the effects of natural disasters on human populations

Approaching

- Chooses a major invention or discovery of the past and illustrates two ways that development affected society and further scientific developments
- Traces the development of two selected inventions, theories or discoveries from their inception to modern day
- Proposes and tests a solution to an existing personal problem
- Designs a product to meet a personal or societal need; tests the product
- Suggests several possible ways to avoid the effects of natural disasters on human populations

Met

- Chooses a major invention or discovery of the past and illustrates many ways that development affected society and further scientific developments
- Traces the development of a selected invention, theory and discovery from their inception to modern day
- Proposes and tests a solution to an existing social or personal problem
- Designs a product to meet a personal or societal need; tests the product and evaluates the test results
- Differentiates among sudden disastrous natural occurrences and slower progressive natural hazards and their effects on human populations
- Suggests several possible ways to avoid the effects of natural disasters on human populations
- Identifies the basic processes of natural ecosystems, and explains how these processes affect and are affected by humans

Exceeds

Is able to perform all Met performance standards at higher levels of complexity:

- Chooses a major invention or discovery of the past and illustrates many ways that development affected society and further scientific developments
- Traces the development of a selected invention, theory and discovery from their inception to modern day
- Proposes and tests a solution to an existing social or personal problem
- Designs a product to meet a personal or societal need; tests the product and evaluates the test results
- Differentiates among sudden disastrous natural occurrences and slower progressive natural hazards and their effects on human populations
- Suggests several possible ways to avoid the effects of natural disasters on human populations
- Identifies the basic processes of natural ecosystems, and explains how these processes affect and are affected by humans

Indicator C: Life Science

Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments Understands the characteristics of living things, the diversity of life and how

Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics.

Pre-Literacy

Beginning

- Describes one difference between living and non-living things
- Describes one basic need of living organisms for survival
- Recognizes and distinguishes similarities and differences between two species
- Identifies one system of the human body

Approaching

- Describes two differences between living and non-living things
- Describes two basic needs of living organisms for survival
- Recognizes and distinguishes similarities and differences among several species
- Identifies two systems of the human body

Met

- Describes differences between living and non-living things
- Describes several basic needs of living organisms for survival
- Recognizes and distinguishes similarities and differences among diverse species
- Identifies the various systems of the human body

- Describes differences between living and non-living things
- Describes all basic needs of living organisms for survival
- Recognizes and distinguishes similarities and differences among diverse species
- Identifies the various systems of the human body

Indicator C: Life Science

Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments
Understands the characteristics of living things, the diversity of life and how

organisms change over time in terms of biological adaptations and genetics.

ABE I

Beginning

- Describes a cause-and-effect relationship in a living system
- Traces the life cycles of one organism
- Identifies the basic structures of plants and animals
- Recognizes that component parts make up the human body systems (e.g., digestive, muscular, skeletal)
- Identifies living versus non-living components within ecosystems
- Defines terms: predator, prey, parasite, host, food chain, and web
- Identifies some characteristics that are common to all individuals of a species/group

Approaching

- Describes two cause-and-effect relationships in living systems
- Traces the life cycles of several organisms
- Identifies the basic structures of plants and animals
- Recognizes that component parts make up the human body systems (e.g., digestive, muscular, skeletal)
- Identifies living versus non-living components within ecosystems
- Defines terms: predator, prey, parasite, host, food chain, and web
- Describes relationships among various organisms in their environment (e.g., predator/prey, parasite/host, food chains and webs)
- Identifies some characteristics that are common to all individuals of a species/group
- Recognizes that offspring within families have both similarities and differences

Met

- Describes and explains cause-and-effect relationships in living systems
- Traces the life cycles of various organisms
- Identifies the basic structures and describes the functions [of the basic structures] of plants and animals
- Recognizes that component parts make up the human body systems (e.g., digestive, muscular, skeletal), including major organs (e.g., lungs, heart, skin) within systems
- Identifies living versus non-living components within ecosystems and describes the interaction among the two
- Defines terms: predator, prey, parasite, host, food chain, and web
- Describes relationships among various organisms in their environment (e.g., predator/prey, parasite/host, food chains and webs)
- Classifies organisms according to common characteristics (e.g., bones, appendages)
- Identifies some characteristics that are common to all individuals of a species/group and recognizes why there are differences and what they are
- Recognizes that offspring within families have both similarities and differences
- Explains that all organisms cause changes, some beneficial and some detrimental, in the environments where they live, giving an example.

ABE I (Life Science)

EXCEEDS

- Describes and explains cause-and-effect relationships in living systems
- Traces the life cycles of various organisms
- Identifies the basic structures and describes the functions [of the basic structures] of plants and animals
- Recognizes that component parts make up the human body systems (e.g., digestive, muscular, skeletal), including major organs (e.g., lungs, heart, skin) within systems
- Identifies living versus non-living components within ecosystems and describes the interaction among the two
- Defines terms: predator, prey, parasite, symbiote, host, food chain, and web
- Describes relationships among various organisms in their environment (e.g., predator/prey, parasite/host, food chains and webs)
- Classifies organisms according to common characteristics (e.g., bones, appendages)
- Identifies some characteristics that are common to all individuals of a species/group and recognizes why there are differences and what they are
- Recognizes that offspring within families have both similarities and differences
- Explains that all organisms cause changes, some beneficial and some detrimental, in the environments where they live, giving multiple examples.

Indicator C: Life Science

Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments

Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics.

ABE II

Beginning

- Constructs a simple classification system based on physical characteristics of organisms
- Identifies the basic structures and functions of various cells
- Identifies the main structures of cells and tissues within an organism
- Identifies vital body systems (e.g., digestion, respiration, excretion, reproduction, circulation, movement, control, coordination)
- Describes one organism's adaptations or constancy over geologic time
- Distinguishes between physical characteristics which are, and are not, inherited
- Describes the components of an ecosystem

Approaching

- Constructs a simple classification system based on physical characteristics of organisms
- Identifies and differentiates between the basic structures and functions of some cells
- Identifies the main structures of cells, tissues, and organ systems within an organism
- Identifies the major components of vital body systems
- Describes two organisms' adaptations or constancy over geologic time
- Describes the role of genes in heredity of one characteristic, and distinguishes between physical characteristics which are, and are not, inherited
- Describes the components of an ecosystem and how living components interact with non-living components.

Met

- Constructs a simple classification system based on physical characteristics of organisms
- Identifies and differentiates between the basic structures and functions of various cells
- Identifies the main structures of cells, tissues, and organ systems within an organism, and identifies the interrelationships among them
- Identifies the major components of vital body systems and identifies the functions of those systems
- Describes many organisms' adaptations or constancy over geologic time
- Describes the role of genes in heredity, and distinguishes between physical characteristics which are, and are not, inherited
- Describes the components of an ecosystem and how living components interact with non-living components.
 Explains that both components are interdependent within an ecosystem, including the adaptation of plants and animals to their environment

Exceeds

- Constructs a simple classification system based on physical characteristics of organisms
- Identifies and differentiates between the basic structures and functions of various cells
- Identifies the main structures of cells, tissues, and organ systems within an organism, and identifies the interrelationships among them
- Identifies the major components of vital body systems and identifies the functions of those systems and how they
 are affected by lifestyle
- Describes many organisms' adaptations or constancy over geologic time
- Describes the role of genes in heredity, and distinguishes between physical characteristics which are, and are not, inherited
- Describes the components of an ecosystem and how living components interact with non-living components.
 Explains that both components are interdependent within an ecosystem, including the adaptation of plants and animals to their environment

Indicator C: Understands the interrelationships of matter and energy in living organisms and the

Life Science

interactions of living organisms with their environments

Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics.

ABE III

Beginning

- Identifies the characteristics of living things
- Constructs classification systems for grouping organisms
- Compares and contrasts the basic structures of various types of cells, tissues, and organs
- Identifies the systems for digestion, respiration, reproduction, circulation, excretion, movement, control, and coordination in the human body
- Describes the theory of evolution
- Distinguishes between dominant and recessive traits
- Identifies the structure and function of systems (e.g., respiratory, digestive, circulatory, nervous
- Explains and models the interaction and interdependence of living and non-living components within ecosystems, including food webs and resources

Approaching

- Identifies the characteristics of living things
- Constructs classification systems for grouping organisms and identifies one organism based on existing classification systems
- Compares and contrasts the basic structures and components of different types of cells, tissues, and organs
- Identifies the systems for digestion, respiration, reproduction, circulation, excretion, movement, control, and coordination in the human body and how some of those systems work together
- Describes the theory of evolution; able to describe species' variation and extinction over geologic time
- Distinguishes between dominant and recessive traits
- Identifies the structure and function of systems (e.g., respiratory, digestive, circulatory, nervous), and gives one
 example of the function of feedback and equilibrium
- Explains and models the interaction and interdependence of living and non-living components within ecosystems, food webs, resources, and energy

Met

- Identifies the characteristics and structure of living things
- Constructs classification systems for grouping organisms and identifies organisms based on existing classification systems
- Compares and contrasts the basic structures, components, and functions of different types of cells, tissues, and organs
- Identifies the systems for digestion, respiration, reproduction, circulation, excretion, movement, control, and coordination in the human body and how those systems work together
- Describes the theory of evolution; able to describe species' diversity and adaptation, variation, and extinction over geologic time
- Describes the role of chromosomes and genes in heredity
- Distinguishes between dominant and recessive traits and describes information that is carried in a gene
- Identifies the structure and function of systems (e.g., respiratory, digestive, circulatory, nervous), and the function
 of feedback and equilibrium
- Explains and models the interaction and interdependence of living and non-living components within ecosystems, including the adaptation of plants and animals to their environment, food webs, resources, and energy

ABE III (Life Science)

- Identifies the characteristics and structure of living things
- Constructs classification systems for grouping organisms and identifies organisms based on existing classification systems
- Compares and contrasts the basic structures, components, and functions of different types of cells, tissues, and organs
- Identifies the systems for digestion, respiration, reproduction, circulation, excretion, movement, control, and coordination in the human body and how those systems work together
- Describes the theory of evolution; able to describe species' diversity and adaptation, variation, and extinction over geologic time
- Describes the role of chromosomes and genes in heredity
- Distinguishes between dominant and recessive traits and describes information that is carried in a gene
- Identifies the structure and function of systems (e.g., respiratory, digestive, circulatory, nervous), and the function of feedback and equilibrium
- Explains and models the interaction and interdependence of living and non-living components within ecosystems, including the adaptation of plants and animals to their environment, food webs, resources, and energy

Indicator C: Life Science

Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments

Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics.

ASE I

Beginning

- Explains the process of respiration
- Describes process of mitosis and the process of meiosis
- Describes how energy is used in maintenance and growth of cells
- Predicts how change in an environmental factor can affect the success or failure of a population to survive
- Describes how a single-celled organism carries out the function of each of the systems found in multi-celled organisms
- Describes the physiology of each system in multi-celled organisms and how one relates to homeostasis
- Identifies the relationship of DNA, genes and chromosomes

Approaching

- Explains the processes of photosynthesis and respiration
- Compares process of mitosis with the process of meiosis
- Describes how energy is used in maintenance, repair, and growth of cells
- Predicts how change in an environmental factor can affect the success or failure of a population to survive and gives one reason for prediction
- Describes how a single-celled organism carries out the function of each of the systems found in multi-celled organisms
- Describes the physiology of each system in multi-celled organisms and how two relate to homeostasis
- Identifies the relationship of DNA, genes and chromosomes and explains how a mutation affects this relationship

Met

- Explains the processes of photosynthesis and respiration in the interdependency of plants and animals
- Compares the purpose and process of mitosis with the purpose and process of meiosis
- Describes how energy is used in maintenance, repair, growth and development of cells
- Predicts how change in an environmental factor can affect the success or failure of a population to survive and gives several reasons for prediction
- Describes how a single-celled organism carries out the function of each of the systems found in multi-celled organisms
- Describes the physiology of each system in multi-celled organisms and how each relates to homeostasis
- Identifies the relationship of DNA, genes and chromosomes and explains how a mutation affects this relationship and the individual

- Explains the processes of photosynthesis and respiration in the interdependency of plants and animals
- Compares the purpose and process of mitosis with the purpose and process of meiosis
- Describes how energy is used in maintenance, repair, growth and development of cells
- Predicts how change in an environmental factor can affect the success or failure of a population to survive and gives several reasons for prediction
- Describes how a single-celled organism carries out the function of each of the systems found in multi-celled organisms
- Describes the physiology of each system in multi-celled organisms and how each relates to homeostasis
- Identifies the relationship of DNA, genes and chromosomes and explains how a mutation affects this relationship and the individual

Indicator C: Life Science

Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments

Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics.

ASE II

Beginning

- Explains how exposure to one factor (e.g., sunlight, ozone, drugs, nitrates) may increase the rate of mutation and cause variances in human diversity
- Describes mutations
- Describes how an environmental change could affect various species within an ecosystem

Approaching

- Explains how exposure to two factors (e.g., sunlight, ozone, drugs, nitrates) may increase the rate of mutation and cause variances in human diversity
- Describes how mutations contribute to genetic diversity
- Describes how an environmental change could affect various species within an ecosystem

Met

- Explains how exposure to several factors (e.g., sunlight, ozone, drugs, nitrates) may increase the rate of mutation and cause variances in human diversity
- Describes how mutations contribute to genetic diversity giving examples
- Using scientific evidence, illustrates that descent from common ancestors produced today's diversity of organisms
- Describes how an environmental change could affect various species within an ecosystem giving examples

- Explains how exposure to several factors (e.g., sunlight, ozone, drugs, nitrates) may increase the rate of mutation and cause variances in human diversity
- Describes how mutations contribute to genetic diversity giving numerous examples
- Using scientific evidence, illustrates that descent from common ancestors produced today's diversity of organisms
- Describes how an environmental change could affect various species within an ecosystem giving examples

Indicator D: Understands the nature of matter and energy including their forms, (Physical Science) the changes they undergo and their interactions

Pre-Literacy

Beginning

Identifies the physical properties of objects

Approaching

 Describes the physical properties (length, mass, volume, temperature, texture, etc.) common to various tangible objects

Met

Compares objects in terms of physical properties

Exceeds

Compares objects in terms of physical properties

Indicator D: Understands the nature of matter and energy including their forms, (Physical Science) the changes they undergo and their interactions

ABE I

Beginning

- Examines, describes, classifies, measures and compares tangible objects in terms of common physical properties (e.g., length, mass, volume, temperature, size, weight, shape, texture, flexibility, color)
- Creates mixtures (e.g., salt and sand, iron filings and soil)
- Recognizes that objects can be made of one or more materials
- Demonstrates that heat and motion can cause changes
- Identifies the different states of matter
- Recognizes that light travels in a straight line

Approaching

- Examines, describes, classifies, measures and compares tangible objects in terms of common physical properties (e.g., length, mass, volume, temperature, size, weight, shape, texture, flexibility, color)
- Creates mixtures and recognizes that they may be separated based on differences in properties
- Recognizes that objects can be made of one or more materials
- Demonstrates that light, heat and motion can cause changes
- Identifies the different states of matter and recognizes that matter can change
- Recognizes that light travels in a straight line and can be absorbed

Met

- Examines, describes, classifies, measures and compares tangible objects in terms of common physical properties (e.g., length, mass, volume, temperature, size, weight, shape, texture, flexibility, color)
- Creates mixtures (e.g., salt and sand, iron filings and soil) and separates them based on differences in properties
- Recognizes that objects can be made of one or more materials
- Demonstrates that light, heat, motion, magnetism and sound can cause changes
- Identifies the different states of matter and recognizes that matter can change and exist in one or more states
- Recognizes that light travels in a straight line and can be reflected, refracted or absorbed.

- Examines, describes, classifies, measures and compares tangible objects in terms of common physical properties (e.g., length, mass, volume, temperature, size, weight, shape, texture, flexibility, color)
- Creates mixtures (e.g., salt and sand, iron filings and soil) and separates them based on differences in properties
- Recognizes that objects can be made of one or more materials
- Demonstrates that light, heat, motion, magnetism and sound can cause changes
- Identifies the different states of matter and recognizes that matter can change and exist in one or more states
- Recognizes that light travels in a straight line and can be reflected, refracted or absorbed.

Indicator D: (Physical Science)

Understands the nature of matter and energy including their forms, the changes they undergo and their interactions

ABE II

Beginning

- Examines, describes, compares, measures, and classifies objects and mixtures of substances based on common physical and chemical properties (e.g., states of matter, mass, volume, density, boiling points, magnetism, solubility)
- Distinguishes between mixtures and compounds
- Identifies various types of energy sources
- Identifies and predicts what will change and what will remain unchanged when matter experiences an external force or energy change (e.g., boiling a liquid)
- Describes characteristics (e.g., speed, distance, mass, force, gravity) of moving objects and their interactions (e.g., force, velocity, acceleration, potential energy and kinetic energy) within a system

Approaching

- Examines, describes, compares, measures, and classifies objects and mixtures of substances based on common
 physical and chemical properties (e.g., states of matter, mass, volume, density, boiling points, pH, magnetism,
 solubility)
- Distinguishes between mixtures and compounds
- Identifies various types of energy sources and describes one way energy is transferred
- Identifies and predicts what will change and what will remain unchanged when matter experiences an external
 force or energy change (e.g., boiling a liquid; comparing the force, distance and work involved in simple
 machines)
- Describes and measures characteristics (e.g., speed, distance, mass, force, gravity) of moving objects and their interactions (e.g., force, velocity, acceleration, potential energy and kinetic energy) within a system

Met

- Examines, describes, compares, measures, and classifies objects and mixtures of substances based on common
 physical and chemical properties (e.g., states of matter, mass, volume, electrical charge, density, boiling points,
 pH, magnetism, solubility)
- Distinguishes between mixtures and compounds
- Identifies various types of energy sources and describes how energy is transferred
- Identifies and predicts what will change and what will remain unchanged when matter experiences an external
 force or energy change (e.g., boiling a liquid; comparing the force, distance and work involved in simple
 machines)
- Describes, measures and calculates characteristics (e.g., speed, distance, mass, force, gravity) of moving objects and their interactions within a system

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 physical and chemical properties (e.g., states of matter, mass, volume, electrical charge, density, boiling points,
 pH, magnetism, solubility)
- Distinguishes between mixtures and compounds
- Identifies various types of energy sources and describes how energy is transferred
- Identifies and predicts what will change and what will remain unchanged when matter experiences an external
 force or energy change (e.g., boiling a liquid; comparing the force, distance and work involved in simple
 machines)
- Describes, measures and calculates characteristics (e.g., speed, distance, mass, force, gravity) of moving objects and their interactions within a system

Indicator D: (Physical Science)

Understands the nature of matter and energy including their forms, the changes they undergo and their interactions

ABE III

Beginning

- Examines, describes, compares, measures, and classifies objects and mixtures of substances based on common
 physical and chemical properties (e.g., states of matter, mass, volume, density, electrical charge, freezing and
 boiling points, pH, magnetism, solubility)
- Classifies and describes matter in terms of elements, compounds, mixtures
- Describes how energy is a property of many substances, occurs in many forms (heat, light, electrical, mechanical, sound, nuclear, and chemical, either potential or kinetic), and can be transferred in many ways
- States the law of conservation of energy
- Identifies and predicts the properties of matter that will change or will remain unchanged when matter experiences an external force or energy change (e.g., changes of state due to heating and cooling, heat absorption and release when chemicals combine, comparing the force, distance and work involved in simple machines)
- Describes, measures, and calculates quantities before and after a chemical or physical change within a system
- Describes, measures and calculates characteristics (e.g., speed, distance, mass, force, gravity) of moving objects and their interactions (e.g., force, velocity, acceleration, potential energy, kinetic energy) within a system

Approaching

- Examines, describes, compares, measures, and classifies objects and mixtures of substances based on common
 physical and chemical properties (e.g., states of matter, mass, volume, density, electrical charge, freezing and
 boiling points, pH, magnetism, solubility)
- Classifies and describes matter in terms of elements, compounds, mixtures, atoms, and molecules
- Describes how energy is a property of many substances, occurs in many forms (heat, light, electrical, mechanical, sound, nuclear, and chemical, either potential or kinetic), and can be transferred in many ways and can give one example
- Defines the law of conservation of energy
- Identifies and predicts the properties of matter that will change or will remain unchanged when matter experiences an external force or energy change (e.g., changes of state due to heating and cooling, heat absorption and release when chemicals combine, comparing the force, distance and work involved in simple machines)
- Describes, measures, and calculates quantities before and after a chemical or physical change within a system and
 uses that data to support the concept of conservation of mass within a closed system
- Describes, measures and calculates characteristics (e.g., speed, distance, mass, force, gravity) of moving objects and their interactions (e.g., force, velocity, acceleration, potential energy, kinetic energy) within a system
- Describes Newton's laws of motion

ABE III (Physical Science)

Met

- Examines, describes, compares, measures, and classifies objects and mixtures of substances based on common
 physical and chemical properties (e.g., states of matter, mass, volume, density, electrical charge, freezing and
 boiling points, pH, magnetism, solubility)
- Classifies and describes matter in terms of elements, compounds, mixtures, atoms, and molecules
- Describes how energy is a property of many substances, occurs in many forms (heat, light, electrical, mechanical, sound, nuclear, and chemical, either potential or kinetic), and can be transferred in many ways and can give various examples
- Defines the law of conservation of energy and gives an example
- Identifies and predicts the properties of matter that will change or will remain unchanged when matter experiences
 an external force or energy change (e.g., changes of state due to heating and cooling, heat absorption and release
 when chemicals combine, comparing the force, distance and work involved in simple machines)
- Describes, measures, and calculates quantities before and after a chemical or physical change within a system and
 uses that data to support the concept of conservation of mass and energy within a closed system
- Describes, measures and calculates characteristics (e.g., speed, distance, mass, force, gravity) of moving objects and their interactions (e.g., force, velocity, acceleration, potential energy, kinetic energy) within a system using Newton's laws of motion

- Examines, describes, compares, measures, and classifies objects and mixtures of substances based on common
 physical and chemical properties (e.g., states of matter, mass, volume, density, electrical charge, freezing and
 boiling points, pH, magnetism, solubility)
- Classifies and describes matter in terms of elements, compounds, mixtures, atoms, and molecules
- Describes how energy is a property of many substances, occurs in many forms (heat, light, electrical, mechanical, sound, nuclear, and chemical, either potential or kinetic), and can be transferred in many ways and can give various examples
- Defines the law of conservation of energy and gives examples
- Identifies and predicts the properties of matter that will change or will remain unchanged when matter experiences an external force or energy change (e.g., changes of state due to heating and cooling, heat absorption and release when chemicals combine, comparing the force, distance and work involved in simple machines)
- Describes, measures, and calculates quantities before and after a chemical or physical change within a system and
 uses that data to support the concept of conservation of mass and energy within a closed system
- Describes, measures and calculates characteristics (e.g., speed, distance, mass, force, gravity) of moving objects and their interactions (e.g., force, velocity, acceleration, potential energy, kinetic energy) within a system using Newton's laws of motion and predicts the effects of changing any of the parameters

Indicator D: (Physical Science)

Understands the nature of matter and energy including their forms, the changes they undergo and their interactions

ASE I

Beginning

- Explains how the sum of energy and matter in systems remains the same despite transference of energy and change in matter
- Determines physical and chemical properties of a substance through observation, experimentation and measurement
- Uses the periodic table to predict the properties of elements
- Identifies qualitative relationships associated with energy
- Uses the law of conservation of energy to explain energy changes in chemical reactions
- Differentiates among elements, atoms and compounds
- Relates equilibrium in Physical Science to homeostasis in Life Science

Approaching

- Explains how the sum of energy and matter in systems remains the same despite transference of energy and change in matter
- Determines physical and chemical properties of a substance through observation, experimentation and measurement
- Uses the periodic table to predict the properties of elements and compounds
- Identifies qualitative and quantitative relationships associated with energy
- Uses the law of conservation of energy to explain energy changes in chemical reactions
- Differentiates among elements, atoms and compounds and their relationship to each other giving simple examples
- Relates equilibrium in Physical Science to homeostasis in Life Science

Met

- Explains how the sum of energy and matter in systems remains the same despite transference of energy and change in matter
- Determines physical and chemical properties of a substance through observation, experimentation and measurement
- Uses the periodic table to predict the properties of elements and compounds
- Identifies and measures qualitative and quantitative relationships associated with energy
- Uses the law of conservation of energy to explain energy changes in chemical reactions
- Differentiates among elements, atoms and compounds and their relationship to each other giving multiple examples
- Relates equilibrium in Physical Science to homeostasis in Life Science

- Explains how the sum of energy and matter in systems remains the same despite transference of energy and change in matter
- Determines physical and chemical properties of a substance through observation, experimentation and measurement
- Uses the periodic table to predict the properties of elements and compounds
- Identifies and measures qualitative and quantitative relationships associated with energy
- Uses the law of conservation of energy to explain energy changes in chemical reactions
- Differentiates among elements, atoms and compounds and their relationship to each other giving multiple examples
- Relates equilibrium in Physical Science to homeostasis in Life Science giving examples

Indicator D: (Physical Science)

Understands the nature of matter and energy including their forms, the changes they undergo and their interactions

ASE II

Beginning

- Demonstrates the use of conceptual models in science (e.g., graphs, diagrams, formulae, etc.)
- States the universal laws of gravitation
- Uses the 1st Law of Thermodynamics to explain the energy changes in a physical system
- Describes a sequence of events that illustrates the 2nd Law of Thermodynamics
- Differentiates between gravitational and electromagnetic forces

Approaching

- Demonstrates the use of conceptual models in science (e.g., graphs, diagrams, formulae, etc.)
- Uses the universal laws of gravitation to predict how gravity force changes with a change of mass
- Uses the 1st Law of Thermodynamics to explain the energy changes in a physical system
- Describes a two sequences of events that illustrate the 2nd Law of Thermodynamics
- Differentiates between gravitational and electromagnetic forces

Met

- Demonstrates the use of conceptual models in science (e.g., graphs, diagrams, formulae, etc.)
- Uses the universal laws of gravitation to predict how gravity force changes with a change of distance and/or mass
- Uses the 1st Law of Thermodynamics to explain the energy changes in a physical system
- Describes various sequences of events that illustrate the 2nd Law of Thermodynamics
- Differentiates between gravitational and electromagnetic forces

- Demonstrates the use of conceptual models in science (e.g., graphs, diagrams, formulae, etc.)
- Uses the universal laws of gravitation to predict and measure how gravity force changes with a change of distance and/or mass
- Uses the 1st Law of Thermodynamics to explain the energy changes in a physical system
- Describes various sequences of events that illustrate the 2nd Law of Thermodynamics
- Differentiates between gravitational and electromagnetic forces

Indicator E: Understands the composition, formative processes, and history of the and (Earth Space Science) Earth, the solar system and the universe

Pre-Literacy

Beginning

- Identifies the basic phenomena and dynamics of common objects in the sky (e.g. sunrise, moon, stars)
- Identifies the position of the sun in relation to the nine planets
- Identifies basic weather phenomena and their effect on daily activities
- Identifies basic earth materials (rocks, soils, water, and gases)
- Identifies some of the major features of the earth's surface (mountains, rivers, plains, etc.)

Approaching

- Identifies the basic phenomena and dynamics of common objects in the sky (e.g. sunrise, moon, stars)
- Identifies the position of the sun in relation to the nine planets
- Identifies basic weather phenomena and their effect on daily activities
- Identifies basic earth materials (rocks, soils, water, and gases) and some of their common uses
- Identifies many of the major features of the earth's surface (mountains, rivers, plains, etc.)

Met

- Identifies the basic phenomena and dynamics of common objects in the sky (e.g. sunrise, moon, stars)
- Identifies the position of the sun in relation to the nine planets
- Identifies basic weather phenomena and their effect on daily activities
- Identifies basic earth materials (rocks, soils, water, and gases) and many common uses
- Identifies the major features of the earth's surface (mountains, rivers, plains, etc.)

- Identifies the basic phenomena and dynamics of common objects in the sky (e.g. sunrise, moon, stars)
- Identifies the position of the sun in relation to the nine planets
- Identifies basic weather phenomena and their effect on daily activities
- Identifies basic earth materials (rocks, soils, water, and gases) and many common uses
- Identifies the major features of the earth's surface (mountains, rivers, plains, etc.)

Indicator E: (Earth Space Science)

Understands the composition, formative processes, and history of the and Earth, the solar system and the universe

ABE I

Beginning

- Describes the basic Earth materials (rocks, soils, water and gases) and the physical properties of at least one
- Identifies the planets and describes their relationship to the Sun
- Recognizes that a major source of the Earth's heat and light is the Sun and describes the motion of the Earth in relation to the Sun
- Identifies the seasons and their characteristics
- Identifies and describes the patterns of movement of objects visible in the sky over time (e.g., the moon)
- Identifies major features of Earth's surface (e.g., mountains, rivers, plains, plateaus) and the natural processes and forces that shape the Earth's surface, including weathering, erosion, and floods that gradually and rapidly shape the Earth's surface
- Describes natural events (e.g., volcanoes, hurricanes)
- Investigates the general characteristics of atmosphere
- Collects and records weather data and notes how human activities are affected by it
- Describes the water resource, its uses and importance
- Describes how fossils provide evidence about the plants and animals that lived long ago

Approaching

- Describes the basic Earth materials (rocks, soils, water and gases) and the physical properties of two of them
- Identifies the planets and describes their relationship to the Sun
- Recognizes that a major source of the Earth's heat and light is the Sun and describes the motion of the Earth in relation to the Sun, including the concepts of day and night
- Identifies the seasons and their characteristics
- Identifies and describes the patterns of movement of objects visible in the sky over time (e.g., seasonal position of the sun)
- Identifies major features of Earth's surface (e.g., mountains, rivers, plains, plateaus) and the natural processes and forces that shape the Earth's surface, including weathering, erosion, floods, and earthquakes that gradually and rapidly shape the Earth's surface
- Describes natural events (e.g., volcanoes, hurricanes, tornadoes, earthquakes)
- Investigates and describes the general characteristics of atmosphere
- Collects and records weather data and notes how human activities are affected by it
- Describes the water resource, its uses, importance, and cyclic patterns of movement through the environment
- Describes how fossils provide evidence about the plants and animals that lived long ago and the nature of the environment at the time

ABE I (EARTH and SPACE SCIENCE)

Met

- Describes the basic Earth materials (rocks, soils, water and gases) and their physical properties
- Identifies the planets and describes their relationship to the Sun and to each other
- Recognizes that a major source of the Earth's heat and light is the Sun and describes the motion of the Earth in relation to the Sun, including the concepts of day, night, year, and the seasons
- Identifies the seasons and their characteristics
- Identifies and describes the patterns of movement of objects visible in the sky over time (e.g., seasonal position of the sun, constellations)
- Identifies major features of Earth's surface (e.g., mountains, rivers, plains, plateaus) and the natural processes and
 forces that shape the Earth's surface, including weathering, erosion, earthquakes, floods, and volcanic activity that
 gradually and rapidly shape the Earth's surface
- Describes natural events (e.g., volcanoes, hurricanes, tornadoes, earthquakes), and explains how they affect humans
- Investigates and describes the general characteristics of atmosphere and the fundamental processes of weather
- Collects and records weather data and notes how human activities are affected by it
- Describes the water resource, its uses, importance, and cyclic patterns of movement through the environment
- Describes how fossils provide evidence about the plants and animals that lived long ago and the nature of the environment at the time

- Describes the basic Earth materials (rocks, soils, water and gases) and their physical properties
- Identifies the planets and describes their relationship to the Sun and to each other
- Recognizes that a major source of the Earth's heat and light is the Sun and describes the motion of the Earth in relation to the Sun, including the concepts of day, night, year, and the seasons
- Identifies the seasons and their characteristics
- Identifies and describes the patterns of movement of objects visible in the sky over time (e.g., seasonal position of the sun, constellations)
- Identifies major features of Earth's surface (e.g., mountains, rivers, plains, plateaus) and the natural processes and forces that shape the Earth's surface, including weathering, erosion, earthquakes, floods, and volcanic activity that gradually and rapidly shape the Earth's surface
- Describes natural events (e.g., volcanoes, hurricanes, tornadoes, earthquakes), and explains how they affect humans
- Investigates and describes the general characteristics of atmosphere and the fundamental processes of weather
- Collects and records weather data and notes how human activities are affected by it
- Describes the water resource, its uses, importance, and cyclic patterns of movement through the environment
- Describes how fossils provide evidence about the plants and animals that lived long ago and the nature of the environment at the time

Indicator E: Understands the composition, formative processes, and history of the and (Earth Space Science) Earth, the solar system and the universe

ABE II

Beginning

- Defines *revolution* and *rotation*
- Describes common objects in the solar system and explains how they are related
- Describes the layers of the Earth
- Explains how rocks, minerals and soil are formed
- Describes how life and environmental conditions have changed over time (geologic and recent)
- Identifies Earth processes
- Explains how water is cycled in nature
- Describes currents and waves
- Describes the basic characteristics of the Earth's bodies of fresh water and salt water
- Describes weather and climate
- Defines basic terms associated with weather systems including fronts and pressure systems
- Identifies the layers of the atmosphere
- Explains how technology has impacted both Earth and space science giving one example

Approaching

- Distinguishes between *revolution* and *rotation*
- Describes common objects in the solar system and explains how they are related
- Describes the layers of the Earth and their compositions
- Explains how rocks, minerals and soil are formed
- Describes how life and environmental conditions have changed over time (geologic and recent)
- Identifies Earth processes and compares the processes that affect the Earth today with those that occurred in the
 past
- Explains how water is cycled in nature and identifies the distribution of water on Earth
- Describes currents, waves, and tides
- Describes the basic characteristics of the Earth's bodies of fresh water and salt water
- Describes the difference between weather and climate
- Defines basic terms associated with weather systems including fronts, pressure systems and types of clouds
- Describes the properties of the layers of the atmosphere
- Explains how technology has impacted both Earth and space science giving two examples

ABE II (Earth and Space Science)

Met

- Distinguishes between *revolution* and *rotation* and gives an example of their effects as seen on the Earth
- Describes common objects in the solar system and explains how they are related
- Describes the layers of the Earth and their compositions
- Explains how rocks, minerals and soil are formed
- Describes how life and environmental conditions have changed over time (geologic and recent)
- Identifies Earth processes and compares the processes that affect the Earth today with those that occurred in the
 past
- Explains how water is cycled in nature and identifies the distribution of water on Earth, underground and in the atmosphere
- Describes currents, waves, tides and ocean floor features
- Describes the basic characteristics of the Earth's bodies of fresh water and salt water
- Describes the difference between weather and climate
- Defines basic terms associated with weather systems including fronts, pressure systems and types of clouds
- Describes the properties and composition of the layers of the atmosphere
- Explains how technology has impacted both Earth and space science giving multiple examples

- Distinguishes between *revolution* and *rotation* and gives an example of their effects as seen on the Earth
- Describes common objects in the solar system and explains how they are related
- Describes the layers of the Earth and their compositions
- Explains how rocks, minerals and soil are formed
- Describes how life and environmental conditions have changed over time (geologic and recent)
- Identifies Earth processes and compares the processes that affect the Earth today with those that occurred in the
 past
- Explains how water is cycled in nature and identifies the distribution of water on Earth, underground and in the atmosphere
- Describes currents, waves, tides and ocean floor features
- Describes the basic characteristics of the Earth's bodies of fresh water and salt water
- Describes the difference between weather and climate
- Defines basic terms associated with weather systems including fronts, pressure systems and types of clouds
- Describes the properties and composition of the layers of the atmosphere
- Explains how technology has impacted both Earth and space science giving multiple examples

Indicator E: (Earth Space Science)

Understands the composition, formative processes, and history of the and Earth, the solar system and the universe

ABE III

Beginning

- Describes and models the motion of the Earth in relation to the sun, including the concepts of day, night, season, and year
- Describes common objects in the universe and explains their relationships including the concepts of galaxies, sun, moon, eclipses, planets, asteroids, comets, and gravity
- Describes the composition (including the formation of minerals, rocks, and soil) and the structure of the Earth (including landforms, oceans)
- Explains how fossils are formed and provide evidence of how life and environmental conditions have changed
- Explains how Earth processes seen today, including erosion, are similar to those that occurred in the past
- Describes the distribution and circulation of the world's water through rivers, ground water, and atmosphere
- Describes the composition and physical characteristics (including currents, waves, tides, and features of the ocean floor) of the Earth's bodies of water
- Describes the composition, properties, and structures of the atmosphere, such as the range and distribution of temperature and pressure in the troposphere
- Observes, analyzes, and records weather patterns and data, including temperature and cloud types over a period of time
- Explains how technology has impacted both earth and space science by describing one technological advances that have impacted both

Approaching

- Describes and models the motion of the Earth in relation to the sun, including the concepts of day, night, season, and year
- Describes common objects in the universe and explains their relationships including the concepts of star clusters, galaxies, sun, moon, eclipses, planets, asteroids, comets, and gravity
- Describes the composition (including the formation of minerals, rocks, and soil) and the structure of the Earth (including landforms, oceans, and lithospheric plates)
- Explains how fossils are formed and provide evidence of how life and environmental conditions have changed
- Explains how Earth processes seen today, including erosion and movement of lithospheric plates are similar to those that occurred in the past
- Describes the distribution and circulation of the world's water through glaciers, rivers, ground water, and atmosphere
- Describes the composition and physical characteristics (including currents, waves, tides, and features of the ocean floor) of the Earth's bodies of water
- Describes the composition, properties, and structures of the atmosphere, such as the range and distribution of temperature and pressure in the troposphere
- Observes, analyzes, and records weather patterns and data, including temperature, cloud types, and humidity over a period of time
- Explains how technology has impacted both earth and space science by describing two technological advances that have impacted both

ABE III (Earth and Space Science)

Met

- Describes and models the motion of the Earth in relation to the sun, including the concepts of day, night, season, and year
- Describes common objects in the universe and explains their relationships including the concepts of multiple star systems, star clusters, galaxies, sun, moon, eclipses, planets, asteroids, comets, and gravity
- Describes the composition (including the formation of minerals, rocks, and soil) and the structure of the Earth (including landforms, oceans, and lithospheric plates); explains the processes involved in the formation of the Earth's structures
- Explains how fossils are formed and provide evidence of how life and environmental conditions have changed
- Explains how Earth processes seen today, including erosion, movement of lithospheric plates, and changes in atmospheric composition, are similar to those that occurred in the past
- Describes the distribution and circulation of the world's water through ocean currents, glaciers, rivers, ground water, and atmosphere
- Describes the composition and physical characteristics (including currents, waves, tides, and features of the ocean floor) of the Earth's bodies of water
- Describes the composition, properties, and structures of the atmosphere, such as the range and distribution of temperature and pressure in the troposphere
- Observes, analyzes, and records weather patterns and data, including temperature, cloud types, humidity, and dew point over a period of time
- Explains how technology has impacted both earth and space science by describing multiple technological advances that have impacted both

- Describes and models the motion of the Earth in relation to the sun, including the concepts of day, night, season, and year
- Describes common objects in the universe and explains their relationships including the concepts of multiple star systems, star clusters, galaxies, sun, moon, eclipses, planets, asteroids, comets, and gravity
- Describes the composition (including the formation of minerals, rocks, and soil) and the structure of the Earth (including landforms, oceans, and lithospheric plates); explains the processes involved in the formation of the Earth's structures
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- Describes the distribution and circulation of the world's water through ocean currents, glaciers, rivers, ground water, and atmosphere
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- Describes the composition, properties, and structures of the atmosphere, such as the range and distribution of temperature and pressure in the troposphere
- Observes, analyzes, and records weather patterns and data, including temperature, cloud types, humidity, and dew point over a period of time
- Explains how technology has impacted both earth and space science by describing multiple technological advances that have impacted both

Indicator E: (Earth Space Science)

Understands the composition, formative processes, and history of the and Earth, the solar system and the universe

ASE I

Beginning

- Suggests ways in which the following events affect living organisms: floods, droughts, earthquakes, heat waves, storms
- Explains the principles of hydrology, including surface and ground water flows and sources of water contamination and pollution
- Uses the theory of plate tectonics to explain the relationship among volcanoes, earthquakes, mid-ocean ridges and deep sea trenches
- Describes how these forces shape the Earth: volcanoes, earthquakes, and wind and water erosion
- Differentiates among the theories of the origin of: the universe (Big Bang Theory), the solar system (nebular dust and gas), and life forms (evolution and creation)
- Illustrates the Earth's rotation and revolution and their effects on the seasons

Approaching

- Suggests ways in which the following events affect living organisms: floods, droughts, earthquakes, heat waves, storms, sunspots
- Explains the principles of hydrology, including surface and ground water flows, desalinization and sources of water contamination and pollution
- Uses the theory of plate tectonics to explain the relationship among volcanoes, earthquakes, mid-ocean ridges and deep sea trenches
- Describes how these forces shape the Earth: landslides, volcanoes, earthquakes, and wind and water erosion
- Differentiates among the theories of the origin of: the universe (Big Bang Theory), the solar system (nebular dust and gas), and life forms (evolution and creation)
- Illustrates the Earth's tilt, rotation and revolution and their effects on the seasons

Met

- Suggests ways in which the following events affect living organisms: floods, droughts, earthquakes, heat waves, storms, sunspots, novas
- Explains the principles of hydrology, including surface and ground water flows, aquifers, percolation, desalinization and sources of water contamination and pollution
- Uses the theory of plate tectonics to explain the relationship among volcanoes, earthquakes, mid-ocean ridges and deep sea trenches
- Describes how these forces shape the Earth: glaciation, landslides, volcanoes, earthquakes, and wind and water erosion
- Differentiates among the theories of the origin of: the universe (Big Bang Theory), the solar system (nebular dust and gas), and life forms (evolution and creation)
- Illustrates the Earth's tilt, rotation and revolution and their effects on the seasons and the length of days

- Suggests ways in which the following events affect living organisms: floods, droughts, earthquakes, heat waves, storms, sunspots, novas
- Explains the principles of hydrology, including surface and ground water flows, aquifers, percolation, desalinization and sources of water contamination and pollution
- Uses the theory of plate tectonics to explain the relationship among volcanoes, earthquakes, mid-ocean ridges and deep sea trenches
- Describes how these forces shape the Earth: glaciation, landslides, volcanoes, earthquakes, and wind and water erosion
- Differentiates among the theories of the origin of: the universe (Big Bang Theory), the solar system (nebular dust and gas), and life forms (evolution and creation)
- Illustrates the Earth's tilt, rotation and revolution and their effects on the seasons and the length of days

Indicator E: Understands the composition, formative processes, and history of the and (Earth Space Science) Earth, the solar system and the universe

ASE II

Beginning

- Discusses the costs, benefits and consequences of natural resource exploration
- Analyzes energy in the Earth's system, including gravitational energy, internal and external sources of energy, weather and climate
- Describes the factors that influence the conservation of water
- Analyzes how weather is influenced by natural and artificial features

Approaching

- Discusses the costs, benefits and consequences of natural resource exploration and development
- Analyzes energy in the Earth's system, including radioactive decay, gravitational energy, internal and external sources of energy, weather and climate
- Describes the factors that influence the recycling and conservation of water
- Analyzes how weather is influenced by natural and artificial features and by natural dynamic processes

Met

- Discusses the costs, benefits and consequences of natural resource exploration, development and consumption
- Analyzes energy in the Earth's system, including radioactive decay, geo-chemical cycles, gravitational energy, internal and external sources of energy, weather and climate
- Describes the factors that influence the reuse, recycling and conservation of water
- Analyzes how weather is influenced by natural and artificial features and by natural and artificial dynamic processes

- Discusses the costs, benefits and consequences of natural resource exploration, development and consumption
- Analyzes energy in the Earth's system, including radioactive decay, geo-chemical cycles, gravitational energy, internal and external sources of energy, weather and climate
- Describes the factors that influence the reuse, recycling and conservation of water
- Analyzes how weather is influenced by natural and artificial features and by natural and artificial dynamic processes

Science Sample Activities*

Standard: The adult learner applies methods of science and technology toward the advancement of personal and community well being.

Indicator A: Understands and uses the processes of scientific investigation and scientific ways of knowing. Able to design, conduct, describe and evaluate these investigations. Understands and applies concepts that unify scientific disciplines (Science as Inquiry)

	Family	Workplace	Community
Pre- Literacy	Students identify and use safe procedures in storage and use of chemicals in the home.	Students identify the snacks in a vending machine and sort them by different characteristics (e.g., taste, color, color of package, price). Determine how many ways they can be grouped together.	Students investigate how many ways duct tape can be used for problem solving. Compare duct tape to other tapes in terms of physical properties, including strength, durability, and function.
ABE I	Students pick a room, closet, cabinet, or drawer. Sort and classify contents into groups according to physical properties (e.g., size, weight, color, texture, shape). Determine how many ways they can be grouped together. Students identify basic parts of a simple familiar system (e.g., clock, bike, park) and describe the relationship between the parts.	Students sort items on a desktop or from within a desk drawer. Classify content into groups according to physical properties (e.g., size, weight, color, texture, shape). Students apply knowledge that objects are made out of different materials (paper, cloth, plastic, metal, wood, stone, glass) by identifying an object (or part of one) composed of each type.	Students conduct an experiment to determine which brand of paper towel is the best in terms of form and function, cost, and personal preference, and write an advertisement for the brand highlighting the findings of the experiment. (M – ABE I:B,E2); (W – ABE II: B4&5)
ABE II	Students evaluate the family's water intake. Collect data of how many 8-ounce glasses of water they drink over the next 24 hours. Graph the results for the family. Devise a plan to ensure that everyone is taking in at least six glasses of water daily. (M – ABE II: B, E2)	Students collect data comparing preferences of coworkers using a survey of ten categories that offer two options (e.g., smoking/non-smoking, soda/coffee, cookies/chips). Make predictions about larger groups for each category. Use results to check your predictions. (M – ABE I & II: B)	Students research a biological hazard (viral, bacterial, or parasitic) that has affected the community. Investigate and identify the cause, symptoms, and treatments or cures. Identify risk factors and precautions people should take to protect themselves. Compare local with national risk factors. (<i>R</i> – <i>ABE II</i> : <i>B</i>)

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ASE I / II Students keep a written record for one all food and drink they consume. List approximate amounts and categorize as basically protein, carbohydrate or f ASE I: B); (R – ASE II: B4)	responsibility for a business, school or church illustrate the interrelationship of each member	n to problem, list several proposed solutions and
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^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator B: Understands the impact of science and technology on human activity and the environment as it relates to the past, present and Future (Science and Technology – Past, Present and Future)

	Family	Workplace	Community
Pre- Literacy	Students describe a technological device and how it affects their daily life.	Students identify examples of simple technology (e.g., paper clip, scissors, zipper) and describe how they are used in the workplace.	Students explain why people should wash their hands before and during food preparation and consumption.
ABE I	Students invent new uses for used items. Identify items in the home that can be recycled by reusing them in other ways (e.g., coffee cans can be used to store nails and screws, large pickle jars can be used to store sugar and flour). Be creative.	Students identify technological objects and describe how work might be done differently if these things had not been invented. Explain how the type of work and/or workload might be different and whether the same work would require hiring more employees. Students explain how the form or shape of objects and equipment in the workplace is frequently related to its use, operation, or function (e.g., stapler, scissors, screwdriver, chisel, etc.).	Students identify occupations in the community that require the application of science and technology. Interview someone who works in one of these occupations. Find out how many science/technology-related courses were required to work in that position. Ask a variety of questions to gather information about the job (e.g., How is science and technology used at this job? Is there a training period? If so, how long is it? Is continuing education a requirement of this job?)

*Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ABE II	Students evaluate how technological inventions have impacted life in the home (e.g., computers, the Internet, cable/digital cable television, DVD players, etc.). List the changes these have or can make on one's lifestyle, positive and negative. (W – ABE II: B3) Students prepare a timeline that shows changes in the way we communicate. (M – ABE II: B); (W ABE III: B2)	Students identify major scientific contributions that have had a direct impact on how work is done at the workplace/office (e.g., pagers, cellular phones, laptop computers, FAX machines, etc.). Students investigate the cost of bringing in new or updating current technological items (e.g., computers, software programs, printers, Xerox machines) in the workplace/office. Determine and compare the advantages and disadvantages. Use findings to support or refute recommendations for purchase. (M – ABE III: B); (W – ABE II: B2)	Students investigate the ways that law enforcement agencies use science and technology to solve crimes in the community. (R – ABE II: B5,6&7) Students compare the advantages and the disadvantages of the invention of this Internet. Describe how the Internet has affected human activity. Investigate the history of the Internet and make a prediction about how the Internet will be in the future. (M – ABE II: B); (R – ABE II: B4; ABE III: B2)
ABE III	Students evaluate the claims and potential risks and benefits of an advertised product (diet plan, tooth cleaner, over the counter drug, etc.). (R – ABE III: B: ASE I: B)	Students conduct a field research project to compare the distribution of birds near the school with a field guide for the region to see if local distributions are the same as regional.	Students hypothesize why people get more colds and flu during the winter and discuss ways to prevent the spread of illness. Students prepare a timeline showing when different subatomic particles were discovered. (M – ABE II: B); (W – ABE III: B2)
ASE I / II	Students identify a machine or appliance used in their home and list the ways it has affected their life. Describe how life would be affected by removing any three technological products from their home. (W – ASE I: B3)	Students describe ways in which technology used in their workplace has affected the environment. (W – ASE I: B2)	Students interview community leaders to assess their plans to accommodate the population after a natural disaster. (W – ASE I: B2); (R – ASE II: B) Students compare and contrast the benefits and risks of genetic engineering. (W – ASE I: B2)

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator C: Understands the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptations and genetics. Understands the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environments (Life Science)

	Family	Workplace	Community
Pre- Literacy	Students describe safe food storage and handling procedures and reasons for doing so.	Students explain the impact of food and sleep on the body, and explain how it relates to work performance and safety in the workplace.	Students plan the supplies and equipment needed for a camping trip and explain their purposes. (W – PL: B2)
ABE I	Students identify and list how family members are both similar and different. Identify traits that are inherited (e.g., eye color, hair color, nose shape) and those that might be from interaction with the environment (e.g., bike-riding ability, ability to play a sport or an instrument, etc.). Students describe what happens when a healthy plant is placed in a dark closet for a week. Explain the importance of sunlight with regard to how plants stay healthy and green. (W – ASE II: B5)	Students conduct an experiment to find out which of their co-workers have the inherited characteristic the ability to roll their tongue and which ones do not. Make a prediction about which will be the larger group. Use results to check your prediction. Report findings. (M – ABE I: B); (W – ABE II: B5) Students compare two popular snacks from the vending machine at work. Compare the cost, taste, calories, fat content, etc. Make a prediction on which one sells faster. Observe the machine daily to check prediction. (M – ABE II: B)	Students identify ways that humans depend on their natural and constructed environments where they live. Investigate things people can do to protect and preserve the natural environment, as well as things to maintain the structures they depend on in their constructed environment. (W – ABE II: B6&7) Students compare and contrast the various ways diseases are transmitted from one person to another. (W – ABE I: B3)
ABE II	Students analyze the frequency of physical fitness activities for each family member over the next week. Devise a plan to incorporate physical fitness activities into the family's current lifestyle at least three times per week. Students use the Food Guide Pyramid (USDA) to plan nutritionally balanced meals for the family's breakfast, lunch, dinner menus for the week. Investigate healthy snacks to eat in between meals. Students recognize characteristics of plants that show adaptations to their environments.	Students investigate which plants grow best in an office with no windows. Which plants grow well with artificial lighting? Make recommendations to purchase plants to brighten the offices with no windows. Students compare the effects of eating a carbohydrate-based snack (e.g., apple, crackers, chips) versus a protein-based snack (a snack with at least 10 g of protein). On one day eat the carbohydrate snack, and record how they feel in half-hour intervals. Note the time they start to feel tired and the time they start to feel hungry. The next day, repeat this with the protein snack. Compare the results. (M – ABE II: B); (W – ABE II: B5)	Students investigate plants that are used to treat medical conditions and diseases, such as cancer. Use the Internet, books, and periodicals to help with research. Which parts of a plant can be used to make medicine? How are plants made into medicine? How many types of these medicines could they find? Have they ever used a medicine that was made from a plant? (R – ABE II: B6&7) Students investigate Fetal Alcohol Syndrome and Fetal Alcohol Effects. How are these two the same? How are they different? (W – ABE III: B2)

ABE III	Students compare eye colors of family members for as many generations as possible, noting dominant traits, and determining as best as possible for parents and grandparents if homozygous or heterozygous.	Students identify a pest in the immediate environment, and use an understanding of food webs to propose and test a way to eliminate the pest without introducing environmental poisons. (W – ASE I: B4)	Students survey (sample) the local community to see how many possess certain inheritable traits (tongue rolling, ear wiggling, widow's peak, chin cleft, etc.) to determine dominance or recessiveness of traits. (M – ABE III: B) Students compare the benefits of DDT with the risks and effects on wildlife. (W – ASE I: B2)
ASE I / II	Students write a week's menu that provides all the appropriate nutrients for optimum function of the bodily systems. (W – ASE I: B4) Students compare and contrast a plant with an animal (e.g., rattlesnake/Saguaro cactus). (W – ASE I: B2)	Students conduct an experiment to determine the effects of light, noise and temperature on worker efficiency. (W - ASE II: B1)	Students create an ecosystem of at least five species, and document how an environmental change affects each species. Students prepare a timeline that shows the history of medical treatments for diseases and wounds. (M – ABE I: B1a); (W – ABE III: B2)

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator D: Understands the nature of matter and energy including their forms, the changes they undergo and their interactions (Physical Science)

	Family	Workplace	Community
Pre- Literacy	Students measure the amount of time it takes for an apple slice to change color, and compare it to a potato slice. $(M - PL: E1)$	Students compare the mass and volume of items to be safely stored in a storage cabinet or shed. (M – PL: E; ABE I: D4&5)	Students predict the bouncing pattern of a basketball under different throwing conditions using previous observations of force and motion. (M – PL: C1)
ABE I	Students predict which items in their house are magnetic, and use a refrigerator magnet to check predictions. Students compare usage of electricity from month to month, using the electricity company's billing statement. Determine ways to decrease the family's use of electricity. (M – ABE I: B) Students identify items in the home that are flammable and/or volatile. Practice safety in the storage of and use of these items. Devise a fire safety plan, which includes escape routes from each room in the house.	Students describe how electricity produces heat, light, sound, and magnetic effects in the workplace. Explain the impact of electricity on workplace activities. (W – ABE II: B3) Students compare the amount of effort it takes to carry objects from one point to another, as opposed to putting them on a cart or chair with wheels and pushing it.	Students compare the momentum of several different types of balls (e.g., tennis ball, baseball, volleyball, basketball, ping pong ball, football, soccer ball) down a sloped surface. Predict which type would be the fastest/slowest, as well as which type would roll the shortest/longest distances. Check predictions with results. 9W – ABE II: B5) Students compare the frequency, length, and speed of a swing to a pendulum. (M – ABE I & II: E)

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ABE II	Students identify and describe chemical and physical changes that take place when cooking different foods. Students identify and list common mixtures (e.g., milk, baking mix, garlic salt, lemon pepper, Raisin Bran), and identify common compounds (e.g., salt, sugar, cleaners of all types). Students slice a number of different fruits and vegetables into pieces that measure the same size. Make predictions about which ones will float. Test each piece separately in a bowl of water. Check results with original predictions. (M – AE II: B)	Students identify simple and complex machines used in the work environment. Students investigate the effect of magnetism on computers. Identify items that contain magnets or strong electromagnetic fields, and make recommendations for keeping these items away from computers in the workplace. (W – ABE II: B3) Students explain the importance of fuses and circuit breakers. Investigate safety hazards involved in using electricity, and describe safe ways to use electricity. (W – ABE II: B3)	Students investigate solar energy as an alternative to using electricity. Determine the advantages and disadvantages of using ONLY solar energy. Identify changes people can make to their homes to utilize solar energy and reduce the amount of electricity that they use. Students investigate food additives (e.g., artificial sweeteners, artificial emulsifiers, preservatives). Compare the advantages to the disadvantages of having chemicals in the foods that we eat. Research health risks associated with food additives. (W – ABE II: B3&5)
ABE III	Students examine, build, and/or repair simple mechanical device (bicycle, part of car, grandfather clock) and describe how it works. Students use knowledge of wave frequency and pitch to compare and purchase stereo speakers.	Students conduct an energy audit of the workplace and develop procedures for reducing waste (of energy).	Students explain the difference between recycling and reusing in terms of mass and energy conservation. (W – ABE III: B2) Students compare the benefits and risks of nuclear energy. (W – ASE I: B2)
ASE I / II	Students trace solar energy to its use by living organisms.	Students determine how different kinds of construction materials would affect the cost, quality and usefulness of home or office furniture. (R – ASE II: B2&4)	Students list reasons why an urban area has severe air quality measurements, and list potential solutions and their consequences to community members.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Indicator E: Understands the composition, formative processes, and history of the Earth, the solar system and the universe (Earth and Space Science)

	Family	Workplace	Community
Pre- Literacy	Students observe and keep a record of the changes of an object's shadow during the course of a day and investigate the source of the variation. (M – PL: E)	Students identify items in the workplace made of basic earth materials. $(W-PL: B2)$	Students identify possible geological hazards in the community (rockslides, flooding in washes, etc.) and recommend ways to avoid them. (W – PL:B2)
ABE I	Students identify items in the home that can be recycled (e.g., paper, newspaper, aluminum cans, plastics, etc.). With the plastics, look for the symbol for recycling (three arrows curved into the shape of a triangle). Devise a plan to get the family to participate in recycling these items. Students observe and record the shape of the moon for several months, then make drawings to predict what will happen in the next week.	Students identify the seasons, their characteristics (e.g., amount of daylight, general temperature range, weather patterns), and calendar events associated with them. Observe and note how the changing of the seasons affects the people they work with, as well as the general atmosphere of the office/workplace.	Students explain and describe how physical environments change due to human activity (e.g., building housing developments, utilizing recreational areas, damming rivers). Students collect and record weather data and note how human activities are affected by it. (M – ABE I: B, E) Students investigate a local environmental issue, such as air or water pollution. Evaluate possible solutions. Identify the best solution and modify if necessary.
ABE II	Students do some stargazing with a constellation chart or guide. See how many constellations they and members of their family can recognize. Students identify planets that are visible in the night sky.	Students identify items in the office/workplace that are made from limited (natural) resources. Investigate possible alternatives (e.g., using items made of man-made materials, items made from recycled goods, altering procedure that utilizes limited resources items, etc.). Use findings to determine the best solution for decreasing the overall consumption of limited resources items.	Students investigate the causes and problems associated with the "Greenhouse Effect." Identify the culprits responsible for breaking down the ozone layer in the Earth's atmosphere. Evaluate possible solutions. Research what is being done on global, national, and local levels, and devise a plan as far as what they can do on a personal level to help slow global warming. (W – ABE II: B3); (R – ABE II: B2,6&7) Students use the Internet to investigate the health effects of long-term space travel. (R – ABE II: B2,6&7)

ABE III	Students investigate old buildings and/or headstones in local cemetery for evidence of differential weathering and explain any differences found. Students create a model that demonstrates how the tilt of the Earth causes seasonal changes. Students compare and contrast planets in the solar system. (W – ASE 1: B2)	Students examine building to identify safest place(s) to be in case of extreme weather and/or earthquake and develop plan for all personnel in case of such event. (W – ABE III: B3)	Students identify a place subject to periodic flooding, evaluate the positive and negative consequences of flooding, study different ways of maintaining, reducing or eliminating the likelihood of flooding, and make recommendations for appropriate land use. (R – ASE I: B2&5); (W – ABE III: B2)
ASE I / II	Students identify products using recycled resources and compare their quality and price to similar products using virgin resources. (W – ASE II: B1)	Students initiate a recycling project and determine the costs and convenience involved in collection, transportation and sales of collected products.	Using graphs, students chart the change in days' lengths and average temperatures for at least six months. Correlate the Earth's tilt to the results. (M – ASE I: B)

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

GLOSSARY OF SCIENCE TERMS

acceleration - a change in velocity (either speed or direction)

cell - the structural and functional basic unit of all living things

chromosomes - threadlike structures located in cell nuclei of organisms which determine the individual characteristics of the organism

climate - characteristic pattern of weather elements in an area over a period of time

density - mass of a substance per unit volume

equilibrium - state of a system in which forces, influences, reactions, etc. balance each other out so there is no net change

force - push or pull

front - sloping interface between two air masses of different temperature and humidity

gene - unit of heredity composed of DNA forming part of a chromosome

heterozygous – a zygote with inherited different alleles at one or more loci

histogram - a graphic representation of a frequency distribution in which the widths of the contiguous vertical bars are proportional to the class widths of the variable and the heights of the bars are proportional to the class frequencies

homeostasis - state of equilibrium produced by a balance of functions and chemical composition within a system

homozygous – having identical alleles at corresponding chromosomal loci

inertia - resistance to acceleration

kinetic energy - energy of motion

law - a formulation describing a relationship that is presumed to hold between or among phenomena for all cases in which the specified conditions are met

law of conservation of energy - the total energy of an isolated system remains constant regardless of changes within a system

law of conservation of mass - the total mass of an isolated system is unchanged by the interaction of its parts

1st law of thermodynamics - (see the law of conservation of energy)

- **2nd law of thermodynamics** the ability of a closed system to do work will decrease over time
- mass measure of a body's inertia, usually measured by gravitation (weight)
- matter anything having mass and volume
- **meiosis** cell division creating four reproductive cells, each with one half the chromosome number of the parent cell
- **mitosis** division of a cell creating two daughter cells containing the same number and kind of chromosomes as the mother cell
- **Newton's law of gravity** gravity is a force between two objects, directly proportional to the product of their masses and inversely proportional to the square of the distance between them

Newton's laws of motion -

1st- a body at rest tends to remain at rest, and a body in (straight line) motion tends to remain in motion unless acted upon by an outside force

2nd- the acceleration of an body is proportional to the body's mass and the force acting upon it. (F= ma)

3rd- if one body exerts a force on another, there is an equal and opposite reaction (opposite force) exerted on the first body by the second

- **organ** any distinct part of an organism specialized to perform one or more functions (will contain many different tissues)
- paradigm an example that epitomizes a set of beliefs at a point in time
- **pH** from a scale used to express acidity or alkalinity of a solution (pH of 7 is neutral, pH <7 is acid, pH >7 alkaline)
- **potential energy** energy stored in a body or system as a consequence of its position, shape, or state
- **pressure system** air mass- area of atmosphere possessing more or less uniform temperature and humidity
- **principle** a rule or law concerning the operation of natural phenomena or mechanical processes
- **revolution** orbital motion about a point
- **rotation** motion in which the path of every point in a moving object is circular or a circular arc centered on a specified axis

scatter plot - graph of points representing a collection of data

solubility - measure of the ability of a substance to be dissolved in a liquid

theory - systematically organized knowledge applicable in a relatively wide variety of circumstances, especially a system of assumptions, accepted principles, and rules of procedures devised to analyze, predict, or otherwise explain the nature or behavior of a specified set of phenomenon

tissue - collection of similar cells organized to carry out one or more particular functions

velocity - speed of a body in a specified direction

volume - space occupied by a body or mass of fluid

weather - state of atmospheric conditions (humidity, precipitation, temperature, cloud cover, visibility, wind) at any one place and time

SOCIAL STUDIES STANDARDS



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Social Studies

Standard: The adult learner uses and applies social studies concepts in a variety of situations.

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Standard: The adult learner uses and applies social studies concepts in a variety of situations.

Pre-Literacy

Indicator A: Applies the <u>behavioral science</u> concepts of psychology, sociology and anthropology to personal and community situations

- 1. Describes moods and emotions
- 2. Describes family structure and relationships

Indicator B: Employs basic <u>economic</u> concepts, evaluates problems, and makes rational choices in his role as a consumer, worker and citizen

1. Describes how family units produce, consume and exchange scarce resources

Indicator C: Demonstrates use of <u>geographic</u> tools to locate and analyze information about people, places and environments

- 1. Defines and demonstrates directional words and phrases (left, right, north, and south)
- 2. Recites address including city, state and country
- 3. Recognizes maps and globes and what they represent

Indicator D: Demonstrates and applies the basic tools of <u>historical</u> research, including chronology and how to collect, interpret, and employ information from historical materials

- 1. Sequences days, months, holidays and personal life events in chronological order
- 2. Using primary source materials, including photographs, artifacts, and interviews, traces the history of a family including important places, events, documents, and customs
- 3. Describes personal family events from the past recognizing that some aspects change (i.e., dress, food, shelter) while many core values and beliefs remain the same

Indicator E: Recognizes key <u>historical</u> places, events, documents, cultures and persons in world, United States and Arizona history; analyzes their significant patterns, themes, ideas, and interrelationships

- 1. Describes the way people lived in earlier days and how their lives would be different today, including examples from Ancient Egypt, Greece, Rome, and American colonial times
- 2. Describes examples of honesty, courage, determination, and individual responsibility in American and world history

Indicator F: Demonstrates knowledge of the structures, functions and symbols of government and applies these to citizenship

- 1. Recognizes how different family members protect one another
- 2. Identifies the purposes of laws and consequences of breaking a law
- 3. Explains the voting process in Arizona
- 4. Identifies that elected officials make laws
- 5. Explains citizen's basic rights
- 6. Explains that American people come from many places to form one nation
- 7. Recites the Pledge of Allegiance
- 8. Recites or recalls the words to the "Star Spangled Banner"
- 9. Recognizes national symbols that represent American democracy and values

ABE I

Indicator A: Applies the <u>behavioral science</u> concepts of psychology, sociology and anthropology to personal and community situations

- 1. Discusses attitudes and prejudice
- 2. Discusses formation of personal values and beliefs
- 3. Discusses the effects of social stratification, ethnicity and gender on individual beliefs, attitudes and behavior

Indicator B: Employs basic <u>economic</u> concepts, evaluates problems, and makes rational choices in his/her roles as a consumer, worker and citizen

- 1. Describes how scarcity affects his/her daily life
- 2. Describes the characteristics of production, distribution, and exchange in an economy

Indicator C: Demonstrates use of <u>geographic</u> tools to locate and analyze information about people, places and environments

- 1. Describes and defines natural features (landforms, bodies of water, mountain, desert, natural resources, etc.)
- 2. Draws simple maps to give directions to local points
- 3. Locates current position on a map or globe
- 4. Defines longitude and latitude
- 5. Recognizes and locates specific land masses and bodies of water
- 6. Describes how people depend on the physical environment and its natural resources to satisfy their basic needs

Indicator D: Demonstrates and applies the basic tools of <u>historical</u> research, including chronology and how to collect, interpret, and employ information from historical materials

- 1. Sequences events in one's personal life in chronological order using a timeline
- 2. Sequences key eras in world, United States and Arizona history
- 3. Describes the importance of individual action and character through the lives of famous persons from recent world, United States and Arizona history

Indicator E: Recognizes key <u>historical</u> places, events, documents, cultures and persons in world, United States and Arizona history; analyzes their significant patterns, themes, ideas, and interrelationships

World History

- 1. Describes Egypt and China, including the contributions of written language, calendars, and architectural monuments such as the pyramids and the Great Wall of China
- 2. Describes the ancient civilizations of Greece and Rome, including the music, art, religion, and sports.

United States History

1. Describes the distinctive economies, symbols, customs and oral traditions of the Native Americans of Arizona.

Indicator F: Demonstrates knowledge of the structures, functions and symbols of government and applies these to citizenship

- 1. Describes the basic structure of the republican-democratic form in the United States government
- 2. Explains the basic structures of communism, dictatorships, monarchy, and theocracy

ABE II

Indicator A: Applies the <u>behavioral science</u> concepts of psychology, sociology and anthropology to personal and community situations

- 1. Identifies the components of personality
- 2. Defines group norms, values and beliefs
- 3. Discusses why and how groups form

Indicator B: Employs basic <u>economic</u> concepts, evaluates problems, and makes rational choices in his/her roles as a consumer, worker and citizen

- 1. Uses basic economic concepts (exchange, opportunity costs, specialization, price) to describe key economic events in United States history
- 2. Uses charts, bar graphs, and pie charts to describe and analyze basic economic concepts

Indicator C: Demonstrates use of <u>geographic</u> tools to locate and analyze information about people, places and environments

- 1. Interprets and use a map key
- 2. Uses longitude and latitude to locate positions on a map or globe
- 3. Describes the characteristics of maps and their uses
- 4. Draws an accurate map after being given a description of a place
- 5. Describes how people can conserve and replenish certain resources

Indicator D: Demonstrates and applies the basic tools of <u>historical</u> research, including chronology and how to collect, interpret, and employ information from historical materials

- 1. Applies chronological terms correctly, including decade, century, and generation
- 2. Identifies and locates primary and secondary information resources
- 3. Distinguishes fact from fiction in historical stories
- 4. Interprets historical data in the form of simple graphs and tables

Indicator E: Recognizes key <u>historical</u> places, events, documents, cultures and persons in world, United States and Arizona history; analyzes their significant patterns, themes, ideas, and interrelationships

World History

- 1. Describes the cultures of the ancient civilizations of Egypt, Africa, Mesopotamia, Asia; the Aztecs, Mayas, and Mound Builders; and Greece and Rome and identifies their major contributions to later civilizations
- 2. Describes the cultures of pre-medieval, medieval Europe, Asia, Africa and the Americas; describes major achievements in science and philosophy

United States History

- 1. Describes the exploration and conquest of the New World by European explorers, including their goals, challenges, successes and failings
- 2. Describes the political, religious, and economic aspects of North American colonization
- 3. Explains the reasons for dissatisfaction with English rule among the colonists and how that contributed to the American Revolution
- 4. Describes the people and events associated with the development of the United States republic
- 5. Describes and locates areas of American expansion into the West and its impact on indigenous peoples
- 6. Identifies the major events leading to the Civil War
- 7. Defines the Industrial Revolution and its effects on American life
- 8. Identifies the countries involved in World War I and the major causes
- 9. Identifies the countries involved in World War II and the major causes
- 10. Identifies the purpose and date of establishment of the League of Nations and the United Nations
- 11. Identifies important inventions of the 20th century

Indicator F: Demonstrates knowledge of the structures, functions and symbols of government and applies these to citizenship

- 1. Identifies the fundamental values of Colonial America (individualism, religious freedom, etc.)
- 2. Identifies fundamental principles in the Declaration of Independence
- 3. Identifies the fundamental principles of the United States Constitution
- 4. Explains the powers granted to the President, Congress and the Supreme Court
- 5. Explains the relationship among the Magna Carta, the Declaration of Independence, the Articles of Confederation, the Constitution and the Bill of Rights

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ABE III

Indicator A: Applies the <u>behavioral science</u> concepts of psychology, sociology and anthropology to personal and community situations

- 1. Describes personality development
- 2. Describes the impact of norms, values, and beliefs on specific group behaviors
- 3. Discusses why and how cultures and societies form

Indicator B: Employs basic <u>economic</u> concepts, evaluates problems, and makes rational choices in his/her roles as a consumer, worker and citizen

- 1. Describes the operation of a market-economy
- 2. Describes the factors that cause economic growth
- 3. Applies the concept of scarcity to family, community and business choices and decision making

Indicator C: Demonstrates use of <u>geographic</u> tools to locate and analyze information about people, places and environments

- 1. Describes the purposes of, and differences among, maps, globes and aerial photographs
- 2. Describes and locates major natural and human-made features that define regions in the US and in the world
- 3. Constructs and interprets maps, charts, graphs and geographic databases
- 4. Describes the causes for and effects of migration and settlement of places
- 5. Describes how people have depended on the physical environment and its natural resources to satisfy their basic needs and the consequences to the natural environment

Indicator D: Demonstrates and applies the basic tools of <u>historical</u> research, including chronology and how to collect, interpret, and employ information from historical materials

- 1. Constructs various timelines of key events, people, and periods of the historical era being studied and explains how major events are related to each other
- 2. Uses primary and secondary information resources to report on places, events, documents, and persons from recent and past world, United States and Arizona history
- 3. Frames questions that can be answered by historical study and research
- 4. Analyzes an historical source and identifies the author's main points, purpose, and when he or she is giving an opinion or stating facts

Indicator E: Recognizes key <u>historical</u> places, events, documents, cultures and persons in world, United States and Arizona history; and analyzes their significant patterns, themes, ideas, and interrelationships

World History

- 1. Describes the economic and political considerations leading to World War I
- 2. Describes the economic and political considerations leading to World War II
- 3. Describes the causes and effects of World War II and the role of the United States in it
- 4. Describes the origins, functions and impact of the League of Nations
- 5. Describes the origins, functions and impact of the United Nations

United States History

- 1. Describes the reasons for colonization; including religious freedom, desire for land, economic opportunity, and a new life, and the key differences among the Atlantic colonies and the role and views of key individuals who founded them
- 2. Describes the economic and political causes, key individuals and consequences of the American Revolution
- 3. Describes the narrative of the people and events associated with the development of the United States Constitution and describe its significance to the foundation of the American Republic
- 4. Explains how the United States acquired additional territory and the concept of Manifest Destiny
- 5. Describes the economic and political causes, the course and consequences of the Civil War, including how it divided the American people
- 6. Describes the character and lasting consequences of Reconstruction
- 7. Describes the transformation of the American economy and the changing, social, economic and political conditions caused by the Industrial Revolution
- 8. Describes the causes and effects of the Great Depression
- 9. Describes the economic and political considerations leading to the Korean Conflict and the Vietnam War and the results of both
- 10. Describes the impact of 20th century inventions on everyday life

Indicator F: Demonstrates knowledge of the structures, functions and symbols of government and applies these to citizenship

- 1. Identifies fundamental constitutional rights expressed in the Bill of Rights (e.g., freedom of religion, expression, due process, right to a fair trial)
- 2. Explains the concepts of federalism, separation of powers, and checks and balances
- 3. Explains the relationships among federal, state, county, city/town and tribal governments
- 4. Explains the legal obligations and responsibilities of citizenship
- 5. Explains the importance of political decision making, petitioning public officials, and analyzing issues
- 6. Describes the processes of recall, referendum, and initiative in Arizona

ASE I /GED

Indicator A: Applies the <u>behavioral science</u> concepts of psychology, sociology and anthropology to personal and community situations

- 1. Discusses various theories of personality development
- 2. Discusses the advantages and disadvantages of living in rural, urban and suburban communities
- 3. Traces the development of urban communities

Indicator B: Employs basic <u>economic</u> concepts, evaluates problems, and makes rational choices in his/her roles as a consumer, worker and citizen

- 1. Describes the basic principles of microeconomics
- 2. Describes how economic concepts relate to personal financial choices (e.g., interest, credit, savings, investment)
- 3. Analyzes the similarities and differences among market, command and mixed economic systems
- 4. Describes the basic principles of macroeconomics
- 5. Analyzes the implications of scarcity at a national level
- 6. Describes the effects of international commerce between the United States and other nations

Indicator C: Demonstrates use of <u>geographic</u> tools to locate and analyze information about people, places and environments

- 1. Explains and interprets basic patterns of geo-political, population and cultural geography
- 2. Describes natural and demographic characteristics of places and uses this knowledge to define regions, their relationships, and patterns of change
- 3. Explains how geographic factors effect human activities
- 4. Constructs and interprets thematic maps depicting various aspects of the United States and world trade and culture
- 5. Explains the changes in the meaning, use and distribution of natural resources

Indicator D: Demonstrates and applies the basic tools of <u>historical</u> research, including chronology and how to collect, interpret, and employ information from historical materials

- 1. Applies chronological and spatial thinking to understand the meaning, implications, and import of historical and current events
- 2. Assesses the credibility of primary and secondary sources and draws sound conclusions from them
- 3. Evaluates different historical accounts and opinions of the same event, person, or issue
- 4. Frames open-ended questions suitable for historical study and research to gather pertinent information
- 5. Interprets historical persons, documents, events and issues in the context of their time

Indicator E: Recognizes key <u>historical places</u>, events, documents, cultures and persons in world, United States and Arizona history; and analyzes their significant patterns, themes, ideas, and interrelationships

World History

- 1. Recognizes various forms of religion and government of ancient civilization; including the traditions, customs, beliefs, and enduring impacts of each in today's world
- 2. Describes the geographic, political, economic, and social characteristics of the Ancient Greek and Roman Civilizations, with emphasis on the development of concepts of government and citizenship and scientific and cultural advancements
- 3. Describes the rise of commerce, trade and the merchant class in Medieval Europe, including the impact of the Catholic Church and the Crusades
- 4. Explains how the Renaissance and Reformation influenced education, art, religion, and government in Europe
- 5. Analyzes the origins, obstacles and impacts of the Age of Exploration
- 6. Explains the worldwide causes and effects of the Industrial Revolution
- 7. Describes the major events of World War I and the role of the United States
- 8. Describes the major events of World War II and the role of the United States
- 9. Describes the worldwide impact of post-World War II technology on living patterns, popular culture, and the environment

United States History

- 1. Describes the political, religious, and economic aspects of North American colonization, including the institutionalization of slavery and the early representative government and democratic practices that emerged
- 2. Describes the aspirations, ideals, and events that served as the foundation for the creation of a new nation forged from 13 states
- 3. Describes the worldwide spread of the ideas of the American Revolution

- 4. Describes the reasons for and destination of the major westward migrations and the impact of such expansion on American Indian nations, including broken treaties and the Long Walk of the Navajos
- 5. Discusses the character and lasting consequences of the Civil War, including the attempts to protect the rights of freedmen and heightened racial antagonism as exemplified by the rise of the Ku Klux Klan
- 6. Explains the Industrial Revolution in terms of the impact of technological innovations and mass production, urbanization, immigration, unionism, social welfare
- 7. Describes the human and natural crises of the Great Depression and the policies and controversies that emerged from the New Deal
- 8. Analyzes the impact of World War II and the Cold War on United States foreign policy
- 9. Describes the confrontations with communism, including the Berlin Blockade, Berlin Wall, Bay of Pigs, Cuban Missile Crisis, Korea, and Vietnam
- 10. Analyzes the Voting Rights, Civil Rights, and Women's Rights movements

Indicator F: Demonstrates knowledge of the structures, functions and symbols of government and applies these to citizenship

- 1. Explains the inalienable rights of individuals and the purpose of government
- 2. Cites Judeo-Christian ideas relevant to the development of the United States Republic
- 3. States why and how the United States Constitution was created
- 4. Analyzes the rights, protection, limits and freedoms included in the United States Constitution and its amendments
- 5. Discusses skills needed to participate in America's government
- 6. Explains the right to vote and the events that led to African Americans, Native Americans, and women gaining this fundamental right
- 7. Describes the poll tax and how it discriminated against certain people
- 8. Analyzes the structures, powers, and roles of the executive, legislative, and judicial branches of the US government

ASE II

Indicator A: Applies the <u>behavioral science</u> concepts of psychology, sociology and anthropology to personal and community situations

1. Develop a personal mission statement incorporating personal values and beliefs

Indicator B: Employs basic <u>economic</u> concepts, evaluates problems, and makes rational choices in his roles as a consumer, worker and citizen

- 1. Describes how households and firms are interdependent and how their relationship is affected by trade, exchange, money and banking
- 2. Analyzes and evaluates the role of government in the mixed market economy of the United States
- 3. Interprets and predicts the effects of international commerce in the United States and other nations
- 4. Uses tables, graphs, diagrams, and charts to analyze economic information germane to current events

Indicator C: Demonstrates use of <u>geographic</u> tools to locate and analyze information about people, places and environments

- 1. Constructs and interprets maps using fundamental cartographic principles to infer geographic relationships and features
- 2. Describes the economic, political, cultural and social processes that interact to shape patterns of human population, interdependence, cooperation and conflict
- 3. Uses geographic knowledge to explain past, interpret present, and anticipate future issues
- 4. Explains policies and programs for resource management, including the trade-off between environmental quality and economic growth

Indicator D: Demonstrates and applies the basic tools of <u>historical</u> research, including chronology and how to collect, interpret, and employ information from historical materials

- 1. Compares the present with the past; evaluating the consequences of past events and decisions and determining the lessons learned
- 2. Traces the development of an author's argument, viewpoint, or perspective in an historical account
- 3. Shows connections between particular events and larger social, economic, and political trends and developments
- 4. Applies historical skills to analyze modern regional conflicts in the world and develop historical interpretations
- 5. Examines different points of view on the same historical events and determines the context in which the statements were made, including the questions asked, the sources used, and the author's perspectives
- 6. Draws personal predictions and conclusions on current events to explain how they are like or unlike past history and defend the position based on that past history
- 7. Traces the impact of past persons, cultures, documents and events on current beliefs and values

Indicator E: Recognizes key <u>historical</u> places, events, documents, cultures and persons in world, United States and Arizona history; and analyzes their significant patterns, themes, ideas, and interrelationships.

World History

- 1. Describes the democratic and scientific revolutions as they evolved throughout the Enlightenment
- 2. Analyzes patterns of change during the 19th century era of imperialism from varied perspectives
- 3. Explains the rise of nationalism and the ethnic and ideological conflicts and how they led to World War I
- 4. Describes the major turning points of World War I and the final outcome
- 5. Analyzes the rise of totalitarianism and influence of world conflicts and how they led to World War II
- 6. Describes the principal theaters of battle, major turning points, and geographic factors in military decisions and outcomes, including Pearl Harbor, the Holocaust, D-Day invasions, the use of the atomic bomb, and the reasons for the Allied victory
- 7. Describes the major international developments after World War II, including the creation of the state of Israel, the rebuilding of Western Europe, Soviet control of Eastern Europe, and Mao and the Chinese Revolution
- 8. Evaluates the ideologies and outcomes of independence movements in the emerging third world

United States History

1. Applies the skills of historical analysis to current social, political, geographic, and economic issues facing the United States; including the reasons for and impact of the nation's changing immigration policy, the persistence of poverty, and the new world order

Indicator F: Demonstrates knowledge of the structures, functions and symbols of government and applies these to citizenship

- 1. Analyzes the rights, protections, limits and freedoms included in the Constitution and Bill of Rights with emphasis on the conflicts that arise between rights (e.g., the tension between right to a fair trial and freedom of the press and between majority rules and individual rights)
- 2. Explains the rights and obligations of the citizens with emphasis on the connection between self-interest and common good
- 3. Discusses how African Americans, Native Americans and women used activism to get the right to vote
- 4. Describes the Electoral College including how the numbers are calculated, how the votes are earned, how the Electoral College nullifies some votes, why votes in sparsely populated states have less leverage, the role of delegates, and how it is possible to be elected without a majority vote
- 5. Analyzes the historical sources and ideas of the United States government, including the influence of the Greeks, Romans, and the great political philosophers
- 6. Explains the Federalist and Anti-Federalist arguments for and against the Constitution

Social Studies Performance Standards

Pre-Literacy

BEGINNING:

The learner is able to:

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Sequence events in chronological order and use several kinds of primary source materials to identify some aspects that change and some core values that remain the same
- Compile a family history for a specific time period using family resource materials
- Recite address including city, state, and country
- Recognize maps and globes and what they represent and use directional words in relation to maps and globes

Answer a <u>few</u> questions regarding the following *concepts*:

History

- the way people lived in earlier days in and how their lives would be different today
- examples of honesty, courage, determination, and individual responsibility drawn from American history

Geography

- directional words and phrases (left, right, north, and south)
- significance of addresses

Government

• national symbols and songs that represent American democracy and values

Economics

• how family units produce, consume, and exchange resources

- family structures and relationships
- words and emotions that influence family relationships

APPROACHING:

The learner is able to:

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Sequence events in chronological order and use several kinds of primary source materials to identify those aspects that change and those core values that remain the same
- Compile a family history for a specific time period using family resource materials
- Compare lifestyles of other cultures and other times to present times
- Recite address including city, state, and country
- Recognize maps and globes and what they represent

Answer <u>some</u> questions regarding the following *concepts*:

History

- the way people lived in earlier days and how their lives would be different today, including examples from ancient civilizations
- examples of honesty, courage, determination, and individual responsibility drawn from American and world history

Geography

- directional words and phrases (left, right, north, and south)
- significance of addresses

Government

- the effects of laws and rules on family, business, and community
- how people come from many places to form our nation and enhance a democracy
- national symbols and songs that represent American democracy and values

Economics

• how family units produce, consume, and exchange scarce resources

- words and emotions that influence family relationships
- family structure and relationships

MET:

The learner is able to:

Demonstrate <u>solid</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Sequence events in chronological order and use a range of primary source materials to identify those aspects that change and those core values that remain the same
- Compare lifestyles of other cultures and other times to present times
- Compile a family history for a specific time period using family resource materials
- Recite address including city, state, and country
- Recognize maps and globes and what they represent

Answer most questions regarding the following *concepts*:

History

- the way people lived in earlier days and how their lives would be different today, including examples from ancient civilizations
- examples of honesty, courage, determination, and individual responsibility drawn from American and world history

Geography

- directional words and phrases (left, right, north, and south)
- significance of addresses

Government

- the effects of laws and rules on family, business, and community
- the rights and responsibilities of citizens and elected officials
- how people come from many places to form our nation and enhance a democracy
- national symbols and songs that represent American democracy and values

Economics

• how family units produce, consume, and exchange scarce resources

- words and emotions that influence family relationships
- family structure and relationships

EXCEEDS:

The learner is able to:

<u>Consistently</u> demonstrate command of the following basic *skills* of historical, geographical and economic reasoning:

- Sequence events in chronological order and use a full range of primary source materials, including photographs, artifacts, interviews, family trees and keepsakes to identify all the aspects that change and those core values that remain the same
- Compile a family history for a specific time period using family resource materials
- Compare lifestyles of other cultures and other times to present times
- Recite address including city, state, and country
- Recognize maps and globes and what they represent

Consistently answer questions regarding the following *concepts*:

History

- the way people lived in earlier days and how their lives would be different today, including examples from ancient civilizations
- examples of honesty, courage, determination, and individual responsibility drawn from American and world history

Geography

- directional words and phrases (left, right, north, and south)
- significance of addresses

Government

- the effects of laws and rules on family, business, and community
- the rights and responsibilities of citizens and elected officials
- how people come from many places to form our nation and enhance a democracy
- national symbols and songs that represent American democracy and values

Economics

• how family units produce, consume, and exchange scarce resources

- words and emotions that influence family relationships
- family structure and relationships

ABE I

BEGINNING:

The learner is able to:

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Sequence key eras in US as well as key events in one's own life using a timeline
- Describe and define current position on a map or globe
- Draw simple maps to give directions to local points and define longitude and latitude

Answer a <u>few</u> questions regarding the following *concepts*:

History

- the distinctive economies, symbols, customs, and oral traditions of the Indians of Arizona
- the importance of individual action and character through the lives of famous persons from US history

Geography

 how people depend on the physical environment and its natural resources to satisfy their basic needs

Economics

 how scarcity affects daily life, with emphasis upon opportunity costs of choice and the cost and benefits of personal saving and spending choices

- attitudes and prejudice
- factors that help create attitudes, behaviors, beliefs, and personal values

APPROACHING:

The learner is able to:

Demonstrate <u>some</u> command of the basic *skills* of historical, geographical and economic reasoning:

- Sequence key eras in US and AZ history as well as key events in one's own life using a timeline
- Describe and define specific natural features (landforms, bodies of water, mountain, desert, natural resources, etc) and current position on a map or globe
- Draw a simple map incorporating physical features and symbols

Answer <u>some</u> questions regarding the following *concepts*:

History

- the contributions of Egypt, China, Greece, and Rome in the areas of music, art, religion, sports, architecture, math, and the written language
- the distinctive economies, symbols, customs, and oral traditions of the Indians of Arizona
- the importance of individual action and character through the lives of famous persons from US and AZ history

Government

- basic structure and functions of US government
- the meaning and impact of the Emancipation Proclamation

Geography

- how people depend on the physical environment and its natural resources to satisfy their basic needs
- latitude and longitude

Economics

- how scarcity affects daily life, with emphasis upon: opportunity costs, and the cost and benefits
 of personal saving and spending choices
- the characteristics of production, distribution, and exchange in an economy

- attitudes and prejudice
- factors that help create attitudes, behaviors, beliefs, and personal values

MET

The learner is able to:

Demonstrate <u>solid</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Sequence key eras in world, US and AZ history as well as key events in one's own life using a timeline
- Describe and define specific natural features (landforms, bodies of water, mountain, desert, natural resources, etc) and current position on a map or globe
- Draw a simple map incorporating physical features and symbols

Answer most questions regarding the following *concepts*:

History

- the contributions of Egypt, China, Greece, and Rome in the areas of music, art, religion, sports, architecture, math, and the written language
- the distinctive economies, symbols, customs, and oral traditions of the Indians of Arizona
- the importance of individual action and character through the lives of famous persons from recent world, US, and AZ history

Government

- the basic structure and functions of democracies, communism, and monarchies
- the meaning and impact of the Emancipation Proclamation

Geography

- how people depend on the physical environment and its natural resources to satisfy their basic needs
- latitude and longitude

Economics

- how scarcity affects daily life, with emphasis upon: opportunity costs, and the cost and benefits of personal saving and spending choices
- the characteristics of production, distribution, and exchange in an economy

- attitudes and prejudice
- factors that help create attitudes, behaviors, beliefs, and personal values

EXCEEDS

The learner is able to

<u>Consistently</u> demonstrate command of the following basic *skills* of historical, geographical and economic reasoning:

- Sequence key eras in world, US and AZ history as well as key events in one's own life using a timeline
- Describe and define specific natural features (landforms, bodies of water, mountain, desert, natural resources, etc) and current position on a map or globe
- Draw a map incorporating physical features and symbols
- Describe how people depend on the physical environment and its natural resources to satisfy their basic needs

Consistently answer questions regarding the following *concepts*:

History

- the contributions of Egypt, China, Greece, and Rome in the areas of music, art, religion, sports, architecture, math, and the written language
- the distinctive economies, symbols, customs and oral traditions of the Indians of Arizona
- the importance of individual action and character through the lives of famous persons from recent world, US, and AZ history

Government

- the basic structure and functions of democracies, communism, and monarchies
- the meaning and impact of the Emancipation Proclamation

Geography

- how people depend on the physical environment and its natural resources to satisfy their basic needs
- latitude and longitude

Economics

- how scarcity affects daily life, with emphasis upon: opportunity costs, and the cost and benefits
 of personal saving and spending choices
- the characteristics of production, distribution, and exchange in an economy

- attitudes and prejudice
- factors that help create attitudes, behaviors, beliefs, and personal values

ABE II

BEGINNING:

The learner is able to:

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Apply chronological terms correctly
- Identify and locate primary and secondary information resources
- Describe the characteristics of maps and their uses, interpret and use a map key, and use longitude and latitude to locate positions on a map or globe
- Use simple charts, bar graphs, and pie charts to describe and analyze basic economic concepts and trends

Answer a few questions regarding the following *concepts*:

History

- the major contributions of the ancient civilizations of Egypt, Mesopotamia, and China; the Aztecs, Mayas, and Mound Builders; and Greece and Rome to later civilizations, including science, philosophy, art, and government
- aspects of New World European exploration and North American colonization
- American expansion into the West and its impact on indigenous peoples
- the major causes of the American Revolution, Civil War, WWI, and WWII

Government

- fundamental values of Colonial America and the principles in the Declaration of Independence and the American Constitution
- the specific powers granted to the President, Congress, and the Supreme Court

Geography

• how people can conserve and replenish certain resources

- the components of personality
- group norms, values and beliefs and how groups form

APPROACHING:

The learner is able to

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Apply chronological terms
- Identify and interpret sources of historical data using primary and secondary written or graphic resources
- Distinguish fact from fiction in historical information
- Describe the characteristics of maps and their uses, interpret and use a map key, and use longitude and latitude to locate positions on a map or globe
- Draw an accurate map after being given a description of a place

Answer <u>some</u> questions regarding the following *concepts*:

History

- the major contributions of the ancient civilizations of Egypt, Mesopotamia, and China; the Aztecs, Mayas, and Mound Builders; and Greece and Rome to later civilizations, including science, philosophy, art, and government
- aspects of New World European exploration and North American colonization
- the eventual dissatisfaction of the colonists with English rule that lead to the American Revolution, and the people and events associated with the development of the United States republic
- American expansion into the West and its impact on indigenous peoples
- the major causes of the American Revolution, Civil War, WWI, and WWII

Government

- fundamental values of Colonial America and the principles in the Declaration of Independence and the American Constitution
- the specific powers granted to the President, Congress, and the Supreme Court

Geography

• how people can conserve and replenish certain resources

- the components of personality
- group norms, values, and beliefs and how groups form

MET:

The learner is able to

Demonstrate <u>solid</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Apply chronological terms correctly
- Identify and interpret sources of historical data using primary and secondary written or graphic resources
- Distinguish fact from fiction in historical information
- Describe the characteristics of maps and their uses, interpret and use a map key, and use longitude and latitude to locate positions on a map or globe
- Draw an accurate map after being given a description of a place
- Use basic economic concepts such as exchange, opportunity costs, specialization, and price to describe key economic events in US history
- Use charts, bar graphs, and pie charts to describe and analyze basic economic concepts and trends

Answer most questions regarding the following concepts:

History

- the major contributions of the ancient civilizations of Egypt, Mesopotamia, and China; the Aztecs, Mayas, and Mound Builders; and Greece and Rome to later civilizations, including science, philosophy, art, and government
- the political, religious, and economic aspects of New World European exploration and North American colonization
- the eventual dissatisfaction of the colonists with English rule that lead to the American Revolution, and the people and events associated with the development of the United States republic
- American expansion into the West and its impact on indigenous peoples
- the major causes of the American Revolution, Civil War, WWI, and WWII
- the Industrial Revolution, its effects on American life, and the important inventions of the 20th century

Government

- fundamental values of Colonial America and the principles in the Declaration of Independence and the American Constitution
- the specific powers granted to the President, Congress, and the Supreme Court
- the significance of the Magna Carta, English Bill of Rights, Mayflower Compact, the Articles of Confederation, and the Bill of Rights

Geography

• how people can conserve and replenish certain resources

- the components of personality
- group norms, values, and beliefs and how groups form

EXCEEDS:

The learner is able to:

<u>Consistently</u> demonstrate command of the following basic *skills* of historical, geographical and economic reasoning:

- Apply chronological terms correctly
- Identify and interpret sources of historical data using primary and secondary written or graphic resources
- Distinguish fact from fiction in historical information
- Describe the characteristics of maps and their uses, interpret and use a map key, and use longitude and latitude to locate positions on a map or globe
- Draw an accurate map after being given a description of a place
- Use basic economic concepts such as exchange, opportunity costs, specialization, and price to describe key economic events in US history
- Use charts, bar graphs, and pie charts to describe and analyze basic economic concepts and trends

Consistently answer questions regarding the following *concepts*:

History

- the major contributions of the ancient civilizations of Egypt, Mesopotamia, and China; the Aztecs, Mayas, and Mound Builders; and Greece and Rome to later civilizations, including science, philosophy, art, and government
- the political, religious, and economic aspects of New World European explorers, North American colonization
- the eventual dissatisfaction of the colonists with English rule that lead to the American Revolution, and the people and events associated with the development of the United States republic
- American expansion into the West and its impact on indigenous peoples
- the major causes of the American Revolution, Civil War, WWI, and WWII
- the Industrial Revolution, its effects on American life, and the important inventions of the 20th century

Government

- fundamental values of Colonial America and the principles in the Declaration of Independence and the American Constitution
- the specific powers granted to the President, Congress, and the Supreme Court
- the significance of the Magna Carta, English Bill of Rights, Mayflower Compact, the Articles of Confederation, and the Bill of Rights

Geography

• how people can conserve and replenish certain resources

- the components of personality
- group norms, values, and beliefs and how groups form

ABE III

BEGINNING:

The learner is able to:

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Construct various timelines of key events, people, and periods of the historical era being studied
- Use primary and secondary information resources to report on places, events, documents, and persons from recent and past world, US, and AZ history
- Describe and locate major natural and man-made features that define regions in the US and the world
- Construct and interpret maps, charts, graphs, and geographic databases

Answer a few questions regarding the following concepts:

History

- the considerations leading to WWI and WWII, and the role of the US in each
- the reasons for colonization, including religious freedom, desire for land, economic opportunity, and a new life
- the people and events associated with the development of the United States Constitution and their significance to the foundation of the American Republic
- the causes, course, and consequences of the Civil War, and Reconstruction including how both divided the American people
- the changing, social, economic and political conditions caused by the Industrial Revolution and the Great Depression
- the economic and political considerations leading to the Korean Conflict and the Vietnam War, and the results of both

Geography

• how people have depended on the physical environment and its natural resources to satisfy their basic needs and the consequences to the natural environment

Government

- fundamental constitutional rights expressed in the Bill of Rights (e.g., freedom of religion, expression, due process, right to a fair trial)
- the legal obligations and responsibilities of citizenship in upholding the Constitution, including obeying the laws, paying taxes, registering for Selective Service, and serving on jury duty
- the processes and importance of political decision making, petitioning public officials, analyzing issues and the Arizona processes of initiative, referendum, and recall in Arizona

- the impact of norms, values, and beliefs on specific group behaviors
- why and how cultures and societies form

APPROACHING:

The learner is able to:

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Construct various timelines of key events, people, and periods of the historical era being studied
- Use primary and secondary information resources to report on places, events, documents, and persons from recent and past world, US, and AZ history
- Frame questions that can be answered by historical study and research
- Analyze a historical source and identify the author's main points
- Describe the purposes of and differences among maps, globes, and aerial photographs
- Describe and locate major natural and man-made features that define regions in the US and the world
- Construct and interpret maps, charts, graphs, and geographic databases

Answer <u>some</u> questions regarding the following *concepts*:

History

- the considerations leading to WWI and WWII, and the role of the US in each
- the origins, functions and impact of the League of Nations and United Nations
- the reasons for colonization, the key differences among the Atlantic colonies and the role and views of key individuals who founded them
- the people and events associated with the development of the United States Constitution and its significance to the foundation of the American Republic
- causes, course, and consequences of the Civil War and Reconstruction, including how both divided the American people
- the changing, social, economic, and political conditions caused by the Industrial Revolution and the Great Depression, and the impact of 20th century inventions on everyday life
- the influence of ancient Greek, Roman, and Judeo-Christian cultures on American Revolutionary thought
- the importance of the Northwest Ordinance of 1787 in prohibiting slavery in territories
- the economic and political considerations leading to the Korean Conflict and the Vietnam War, and the results of both

Government

- fundamental constitutional rights expressed in the Bill of Rights (e.g. freedom of religion, expression, due process, right to a fair trial)
- the legal obligations and responsibilities of citizenship in upholding the Constitution, including obeying the laws, paying taxes, registering for Selective Service, and serving on jury duty
- the processes and importance of political decision making, petitioning public officials, analyzing issues and the Arizona processes of initiative, referendum, and recall s

Geography

• how people have depended on the physical environment and its natural resources to satisfy their basic needs and the consequences to the natural environment

Economics

- market economy and its effects on growth and scarcity
- the factors that cause economic growth, with emphasis on investment in human capital, investment in real capital, and the role of entrepreneurs in the free enterprise system

- personality development
- the impact of norms, values, and beliefs on specific group behaviors
- why and how cultures and societies form

MET:

The learner is able to:

Demonstrate <u>solid</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Construct various timelines of key events, people, and periods of the historical era being studied and explain how major events are related to each other
- Use primary and secondary information resources to report on places, events, documents, and persons from recent and past world, US, and AZ history
- Frame questions that can be answered by historical study and research
- Analyze a historical source and identify the author's main points, purpose, and whether he or she is giving an opinion or stating facts
- Describe the purposes of and differences among maps, globes, and aerial photographs
- Describe and locate major natural and man-made features that define regions in the US and the world
- Construct and interpret maps, charts, graphs, and geographic databases

Answer most questions regarding the following concepts:

- the economic, social, and political considerations leading to WWI and WWII, and the role of the US in each
- the origins, functions, and impact of the League of Nations and United Nations
- the reasons for colonization, including the desire for religious freedom, land, economic opportunity, and a new life; and the key differences among the Atlantic colonies and the role and views of key individuals who founded them
- the people and events associated with the development of the United States Constitution and its significance to the foundation of the American Republic
- the concept of Manifest Destiny and the acquisition of how additional territory
- causes, course, and consequences of the Civil War and Reconstruction, including how both divided the American people
- the transformation of the American economy, including the changing social, economic, and political conditions caused by the Industrial Revolution and the Great Depression, and the impact of 20th century inventions on everyday life
- the economic and political considerations leading to the Korean Conflict and the Vietnam War, and the results of both
- the influence of ancient Greek, Roman, and Judeo-Christian cultures on American Revolutionary thought
- the importance of the Northwest Ordinance of 1787 in prohibiting slavery in territories

- how political philosophies impacted US government, including those of John Locke, William Blackstone, James Madison, and Baron de Montesquieu
- the characteristics of our form of government, including the workings of our federal system and the varied relationships among federal, state, county, city/town, and tribal governments
- fundamental constitutional rights expressed in the Bill of Rights (e.g., freedom of religion, expression, due process, right to a fair trial)
- the legal obligations and responsibilities of citizenship in upholding the Constitution, including obeying the laws, paying taxes, registering for Selective Service, and serving on jury duty
- the processes and importance of political decision making, petitioning public officials, analyzing issues, and the Arizona processes of initiative, referendum, and recall

Geography

- the causes and effects of migration and settlement
- how people have depended on the physical environment and its natural resources to satisfy their basic needs and the consequences to the natural environment

Economics

- the operation of a market economy, with emphasis on Adam Smith's ideas and the functions and relationships among various institutions that make up an economic system
- scarcity, opportunity cost, and trade-off and how they influence individual, government, and business decision-making
- the factors that cause economic growth, with emphasis on investment in human and capital, and the role of entrepreneurs in the free enterprise system

- personality development
- the impact of norms, values, and beliefs on specific group behaviors
- why and how cultures and societies form

EXCEEDS

The learner is able to:

<u>Consistently</u> demonstrate command of the following basic *skills* of historical, geographical and economic reasoning:

- Construct various timelines of key events, people, and periods of the historical era being studied and explain how major events are related to each other
- Use primary and secondary information resources to report on places, events, documents, and persons from recent and past world, US, and AZ history
- Frame questions that can be answered by historical study and research
- Analyze a historical source and identify the author's main points, purpose, and whether he or she is giving an opinion or stating facts
- Describe the purposes of and differences among maps, globes, and aerial photographs
- Describe and locate major natural and man-made features that define regions in the US and the world
- Construct and interpret maps, charts, graphs, and geographic databases

Consistently answer questions regarding the following *concepts*:

- the economic, social, and political considerations leading to WWI and WWII, and the role of the US in each
- the origins, functions, and impact of the League of Nations and United Nations
- the reasons for colonization, including the desire for religious freedom, land, economic opportunity, and a new life; and the key differences among the Atlantic colonies and the role and views of key individuals who founded them
- the people and events associated with the development of the United States Constitution and its significance to the foundation of the American Republic
- the concept of Manifest Destiny and the acquisition of how additional territory
- causes, course, and consequences of the Civil War and Reconstruction, including how both divided the American people
- the transformation of the American economy, including the changing social, economic, and political conditions caused by the Industrial Revolution and the Great Depression, and the impact of 20th century inventions on everyday life
- the economic and political considerations leading to the Korean Conflict and the Vietnam War, and the results of both
- the influence of ancient Greek, Roman, and Judeo-Christian cultures on American Revolutionary thought
- the importance of the Northwest Ordinance of 1787 in prohibiting slavery in territories

- how political philosophies impacted US government, including those of John Locke, William Blackstone, James Madison, and Baron de Montesquieu
- the characteristics of our form of government, including the workings of our federal system and the varied relationships among federal, state, county, city/town, and tribal governments
- fundamental constitutional rights expressed in the Bill of Rights (e.g., freedom of religion, expression, due process, right to a fair trial)
- the legal obligations and responsibilities of citizenship in upholding the Constitution, including obeying the laws, paying taxes, registering for Selective Service, and serving on jury duty
- the processes and importance of political decision making, petitioning public officials, analyzing issues, and the Arizona processes of initiative, referendum, and recall

Geography

- the causes and effects of migration and settlement
- how people have depended on the physical environment and its natural resources to satisfy their basic needs and the consequences to the natural environment

Economics

- the operation of a market economy, with emphasis on Adam Smith's ideas and the functions and relationships among various institutions that make up an economic system
- scarcity, opportunity cost, and trade-off and how they influence individual, government, and business decision-making
- the factors that cause economic growth, with emphasis on investment in human and capital, and the role of entrepreneurs in the free enterprise system

- personality development
- the impact of norms, values, and beliefs on specific group behaviors
- why and how cultures and societies form

ASE I

BEGINNING:

The learner is able to:

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Apply chronological and spatial thinking to understand the meaning, implications, and import
 of historical and current events, including interpreting historical events, eras, and issues in the
 context of their time
- Frame open-ended questions suitable for historical research; evaluate and assess the credibility of primary and secondary sources; and draw sound conclusions from them

Answer a few questions regarding the following concepts:

History

- the characteristics of ancient civilizations, with emphasis on the development of government, citizenship, scientific, and cultural advancements, and the enduring impact of each in today's world
- the causes, events, and effects of WWI and WWII, including the impact of post-WWII technology
- aspects of North American colonization, with emphasis on the institutionalization of slavery, the early representative government, and the democratic practices that emerged
- the aspirations, ideals, and events that served as the foundation for the creation of a new nation
- the reasons for and impact of the major westward migrations on American Indian nations, with emphasis on broken treaties and the Long Walk of the Navajos
- the character and lasting consequences of the Civil War, with emphasis on attempts to protect the rights of freedmen and heightened racial antagonism
- the character and impact of the worldwide Industrial Revolution, with emphasis on the technological innovations, urbanization, immigration, unionism, and social welfare
- the human and natural crises of the Great Depression and the policies and controversies that emerged from the New Deal

Government

- the rights and obligations of citizens with emphasis on obeying the law, serving on juries, paying taxes, voting, and registering for military service
- skills needed to participate in US government
- the right to vote and the events that led to African Americans, Native Americans, and women gaining this fundamental right
- the structures, powers, and roles of the executive, legislative, and judicial branches of the US government

Geography

- the relationship between natural and man-made characteristics of places and how this defines regions and patterns of change
- the effect of physical features on the location of human activities
- the changes in the value, use, and distribution of natural resources

Economics

- role and interdependence of households, firms, and governments in the circular flow model of economic activity
- the effects of international commerce on the United States and other nations, with emphasis on protectionism, tariffs, and quotas on international trade
- results of personal financial choices

Behavioral Sciences

• the development, advantages, and disadvantages of rural and urban communities

APPROACHING:

The learner is able to:

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Apply chronological and spatial thinking to understand the meaning, implications, and import
 of historical and current events, including interpreting historical events, eras, and issues in the
 context of their time
- Frame open-ended questions suitable for historical research; evaluate different historical accounts and opinions of the same event, person, or issue; and assess the credibility of primary and secondary sources and draw sound conclusions from them
- Construct and interpret thematic maps depicting various aspects of the US and world trade and culture

Answer <u>some</u> questions regarding the following *concepts*:

- the geographic, political, economic, and social characteristics of ancient civilizations
- how the Renaissance and Reformation influenced education, art, religion, and government in Europe; and the origins, obstacles and impacts of the Age of Exploration
- the causes, events, and effects of WWI and WWII, including the impact of post-WWII technology on living patterns, popular culture, and the environment
- the political, religious, and economic aspects of North American colonization, with emphasis on the institutionalization of slavery, the early representative government, and the democratic practices that emerged
- the aspirations, ideals, and events that served as the foundation for the creation of a new nation and the eventual worldwide spread of the ideas of the American Revolution
- the reasons for and impact of the major westward migrations on American Indian nations, with emphasis on broken treaties and the Long Walk of the Navajos
- the character and lasting consequences of the Civil War, with emphasis on attempts to protect the rights of freedmen and heightened racial antagonism
- the character and impact of the worldwide Industrial Revolution with emphasis on the technological innovations, urbanization, immigration, unionism, and social welfare
- the human and natural crises of the Great Depression and the policies and controversies that emerged from the New Deal
- the substance and meaning of the Voting Rights, Civil Rights, and Women's Rights movements of the 20th Century

- the rights, protection, limits, and freedoms included in the US Constitution and the Bill of Rights
- the rights and obligations of the citizens with emphasis on obeying the law, serving on juries, paying taxes, voting, and registering for military service
- skills needed to participate in US government
- the right to vote and the events that led to African Americans, Native Americans, and women gaining this fundamental right
- the structures, powers, and roles of the executive, legislative, and judicial branches of the US government

Geography

- the relationship of natural and man-made characteristics of places and how this defines regions and patterns of change
- effects of physical features on the location of human activities
- the changes in the value, use, and distribution of natural resources

Economics

- the implications of the economic problem of scarcity with emphasis on why governments choose some things and forgo others
- role and interdependence of households, firms, and governments in the circular flow model of economic activity
- the effects of international commerce on the United States and other nations, with emphasis on the law of comparative advantage, and effects of protectionism, tariffs and quotas on international trade
- results of personal financial choices

- theories of personality development
- the development, advantages and disadvantages of rural and urban communities

MET:

The learner is able to;

Demonstrate <u>solid</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Apply chronological and spatial thinking to understand the meaning, implications, and import
 of historical and current events, including interpreting historical events, eras, and issues in the
 context of their time
- Frame open-ended questions suitable for historical research; evaluate different historical accounts and opinions of the same event, person, or issue; assess the credibility of primary and secondary sources; and draw sound conclusions from them
- Explain and interpret basic patterns of geo-political, population, and cultural geography
- Construct and interpret thematic maps depicting various aspects of the US and world trade and culture

Answer most questions regarding the following concepts:

- the geographic, political, economic, and social characteristics of ancient civilizations, with emphasis on the development of government, citizenship scientific, and cultural advancements and the enduring impact of each in today's world
- the rise of commerce, trade, and the merchant class in Medieval Europe; the impact of the Catholic Church and the Crusades; how the Renaissance and Reformation influenced education, art, religion, and government in Europe; and the origins, obstacles, and impacts of the Age of Exploration
- the causes, events, and effects of WWI and WWII, including the impact of post-WWII technology on living patterns, popular culture, and the environment
- the political, religious, and economic aspects of North American colonization, with emphasis on the institutionalization of slavery, the early representative government, and democratic practices that emerged
- the aspirations, ideals, and events that served as the foundation for the creation of a new nation and the eventual worldwide spread of the ideas of the American Revolution
- the reasons for and impact of the major westward migrations on American Indian nations, with emphasis on broken treaties and the Long Walk of the Navajos
- the character and lasting consequences of the Civil War, with emphasis on attempts to protect the rights of freedmen and heightened racial antagonism
- the character and impact of the worldwide Industrial Revolution with emphasis on the technological innovations, urbanization, immigration, unionism, and social welfare
- the human and natural crises of the Great Depression and the policies and controversies that emerged from the New Deal
- the impact of WWII and the Cold War on United States foreign policy, with emphasis on the confrontations with communism, including the Berlin Blockade, Berlin Wall, Bay of Pigs, Cuban Missile Crisis, Korea, and Vietnam
- the substance and meaning of the Voting Rights, Civil Rights, and Women's Rights movements of the 20th Century

- the inalienable rights of individuals and the purpose of government in terms of the Rights of Englishmen, Magna Carta, the representative form of government in England and the Declaration of Independence
- moral and ethical Judeo-Christian ideals in relation to human rights and the development of the US Republic
- the division and sharing of powers within the federal system of government, with emphasis on federal supremacy, state sovereignty, concurrent powers, tribal governments, and power conflicts
- the rights, protection, limits, and freedoms included in the US Constitution and the Bill of Rights
- the rights and obligations of the citizens with emphasis on obeying the law, serving on juries, paying taxes, voting, and registering for military service
- skills needed to participate in US government
- the right to vote and the events that led to African Americans, Native Americans, and women gaining this fundamental right
- the structures, powers, and roles of the executive, legislative, and judicial branches of the US government

Geography

- the relationship between natural and man-made characteristics of places and how this defines regions and patterns of change
- effects of physical features on the location of human activities
- the changes in the value, use, and distribution of natural resources

Economics

- the basic principles of micro- and macroeconomics
- the similarities and differences among market, command, and mixed economies, including the roles of production, distribution, and consumption of products
- the implications of the economic problem of scarcity, with emphasis on why governments choose some things and forgo others
- role and interdependence of households, firms, and governments in the circular flow model of economic activity
- the effects of international commerce on the United States and other nations, with emphasis on the law of comparative advantage, and effects of protectionism, tariffs, and quotas on international trade
- results of personal financial choices

- theories of personality development
- the development, advantages, and disadvantages of rural and urban communities

EXCEEDS:

The learner is able to:

<u>Consistently</u> demonstrate command of the following basic *skills* of historical, geographical and economic reasoning:

- Apply chronological and spatial thinking to understand the meaning, implications, and import
 of historical and current events, including interpreting historical events, eras, and issues in the
 context of their time
- Frame open-ended questions suitable for historical research; evaluate different historical accounts and opinions of the same event, person, or issue; assess the credibility of primary and secondary sources; and draw sound conclusions from them
- Explain and interpret basic patterns of geo-political, population, and cultural geography
- Construct and interpret thematic maps depicting various aspects of the US and world trade and culture

Consistently answer questions regarding the following *concepts*:

- the geographic, political, economic, and social characteristics of ancient civilizations, with emphasis on the development of government, citizenship scientific, and cultural advancements and the enduring impact of each in today's world
- the rise of commerce, trade, and the merchant class in Medieval Europe; the impact of the Catholic Church and the Crusades; how the Renaissance and Reformation influenced education, art, religion, and government in Europe; and the origins, obstacles, and impacts of the Age of Exploration
- the causes, events, and effects of WWI and WWII, including the impact of post-WWII technology on living patterns, popular culture, and the environment
- the political, religious, and economic aspects of North American colonization, with emphasis on the institutionalization of slavery, the early representative government, and democratic practices that emerged
- the aspirations, ideals, and events that served as the foundation for the creation of a new nation and the eventual worldwide spread of the ideas of the American Revolution
- the reasons for and impact of the major westward migrations on American Indian nations, with emphasis on broken treaties and the Long Walk of the Navajos
- the character and lasting consequences of the Civil War with emphasis on attempts to protect the rights of freedmen and heightened racial antagonism
- the character and impact of the worldwide Industrial Revolution with emphasis on the technological innovations, urbanization, immigration, unionism, and social welfare
- the human and natural crises of the Great Depression, and the policies and controversies that emerged from the New Deal
- the impact of WWII and the Cold War on United States foreign policy, with emphasis on the confrontations with communism, including the Berlin Blockade, Berlin Wall, Bay of Pigs, Cuban Missile Crisis, Korea, and Vietnam
- the substance and meaning of the Voting Rights, Civil Rights, and Women's Rights movements of the 20th Century

- the inalienable rights of individuals and the purpose of government in terms of the Rights of Englishmen, Magna Carta, the representative form of government in England, and the Declaration of Independence
- moral and ethical Judeo-Christian ideals in relation to human rights and the development of the US Republic
- the division and sharing of powers within the federal system of government, with emphasis on federal supremacy, state sovereignty, concurrent powers, tribal governments, and power conflicts
- the rights, protection, limits, and freedoms included in the US Constitution and the Bill of Rights
- the rights and obligations of the citizens with emphasis on obeying the law, serving on juries, paying taxes, voting, and registering for military service
- skills needed to participate in US government
- the right to vote and the events that led to African Americans, Native Americans, and women gaining this fundamental right
- the structures, powers, and roles of the executive, legislative, and judicial branches of the US government

Geography

- the relationship between natural and man-made characteristics of places and how this defines regions and patterns of change
- effects of physical features on the location of human activities
- the changes in the value, use, and distribution of natural resources

Economics

- the basic principles of micro- and macroeconomics
- the similarities and differences among market, command, and mixed economies, including the roles of production, distribution, and consumption of products
- the implications of the economic problem of scarcity with emphasis on why governments choose some things and forgo others
- role and interdependence of households, firms, and governments in the circular flow model of economic activity
- the effects of international commerce on the United States and other nations, with emphasis on the law of comparative advantage and effects of protectionism, tariffs, and quotas on international trade
- results of personal financial choices

- theories of personality development
 - the development, advantages, and disadvantages of rural and urban communities

ASE II

BEGINNING:

The learner is able to:

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Trace the development of an author's argument, viewpoint, or perspective in a historical account
- Examine different points of view on the same historical events and determine the context in which the statements were made, including the questions asked, the sources used, and the author's perspectives
- Draw personal predictions and conclusions on current events to explain how they are like or unlike past history and defend the position based on that past history
- Trace the impact of people, cultures, documents, and events from the past on current beliefs and values
- Construct and interpret maps using fundamental cartographic principles to infer geographic relationships and features
- Use tables, graphs, diagrams, and charts to analyze economic information germane to current events
- Develop a personal mission statement incorporating personal values and beliefs

Answer a few questions regarding the following *concepts*:

History

- the ideologies and outcomes of independence movements in emerging third world countries
- the rise of nationalism and how the ethnic and ideological conflicts lead to the WWI
- the principal theaters of battle, major turning points, and geographic factors in military decisions for the Allied victory of WWII, and the major international developments after the war
- the rise of totalitarianism and influence of world conflicts leading up to Soviet control of Eastern Europe, and the Mao and Chinese Revolutions

Government

- the rights, protection, limits, and freedoms included in the Constitution and Bill of Rights with emphasis on the conflicts that arise between rights
- the rights and obligations of citizens with emphasis on the connection between self-interest, common good, and essential elements of civic virtue
- how African Americans, Native Americans, and women used activism to get the right to vote

Geography

• policies and programs for resource management, including the trade-off between environmental quality and economic growth

Economics

- economic concepts germane to personal financial choices, with emphasis on consumer credit, simple vs. compound interest, investment and savings, and discretionary and disposable income
- how households and firms are interdependent and how their relationship is affected by trade, exchange, money, and banking
- the role of government in the mixed market economy of the United States, with emphasis on revenue and spending choices of federal and state governments and effects of progressive, proportional, and regressive income taxes on different income groups

APPROACHING:

The learner is able to:

Demonstrate <u>some</u> command of the following basic *skills* of historical, geographical and economic reasoning:

- Trace the development of an author's argument, viewpoint, or perspective in a historical account
- Examine different points of view on the same historical events and determine the context in which the statements were made, including the questions asked, the sources used, and the authors' perspectives
- Compare and contrast past and present events to identify trends, evaluate consequences, and analyze lessons learned
- Draw personal predictions and conclusions on current events to explain how they are like or unlike past history and defend the position based on that past history
- Trace the impact of people, cultures, documents, and events from the past on current beliefs and values
- Apply the skills of historical analysis to current social, political, geographic, and economic issues facing the United States, including the reasons for and impact of the nation's changing immigration policy, and the persistence of poverty
- Construct and interpret maps using fundamental cartographic principles to infer geographic relationships and features
- Use tables, graphs, diagrams, and charts to analyze economic information germane to current events
- Develop a personal mission statement incorporating personal values and beliefs

Answer <u>some</u> questions regarding the following *concepts*:

History

- the democratic and scientific revolutions as they evolved throughout the Enlightenment and patterns of change during the 19th century era of imperialism
- the ideologies and outcomes of independence movements in emerging third world countries
- the rise of nationalism and how the ethnic and ideological conflicts lead to WWI
- the principal theaters of battle, major turning points, and geographic factors in military decisions for the Allied victory of WWII, and the major international developments after the war
- the rise of totalitarianism and influence of world conflicts leading up to Soviet control of Eastern Europe, and the Mao and Chinese Revolutions

Government

- the rights, protection, limits, and freedoms included in the Constitution and Bill of Rights with emphasis on the conflicts that arise between rights
- the rights and obligations of citizens with emphasis on the connection between self-interest, the common good, and essential elements of civic virtue

- historical sources and ideals that have influenced the structures of government with emphasis on democracy by Greeks; essential principles of the Roman Republic, and individual rights in the English Bill of Rights
- how African Americans, Native Americans, and women used activism to get the right to vote
- the workings of the Electoral College

Geography

- the economic, political, cultural, and social processes that interact to shape patterns of human population, interdependence, cooperation, and conflict
- policies and programs for resource management, including the trade-off between environmental quality and economic growth

Economics

- economic concepts germane to personal financial choices, with emphasis on consumer credit, simple vs. compound interest, investment and savings, and discretionary and disposable income
- how households and firms are interdependent and how their relationship is affected by trade, exchange, money, and banking
- the role of government in the mixed market economy of the United States, with emphasis on revenue and spending choices of federal and state governments and effects of progressive, proportional, and regressive income taxes on different income groups

MET:

The learner is able to:

Demonstrate <u>solid</u> command of the following basic *skills* of historical, geographical, and economic reasoning:

- Trace the development of an author's argument, viewpoint, or perspective in a historical account
- Examine different points of view on the same historical events and determine the context in which the statements were made, including the questions asked, the sources used, and the author's perspectives
- Compare and contrast past and present events to identify trends, evaluate consequences, and analyze lessons learned
- Draw personal predictions and conclusions on current events to explain how they are like or unlike past history and defend the position based on that past history
- Trace the impact of people, cultures, documents, and events from the past on current beliefs and values
- Apply the skills of historical analysis to current social, political, geographic, and economic
 issues facing the United States and the world, including the reasons for and impact of the
 nation's changing immigration policy, the persistence of poverty, the new world disorder and
 dangers; and modern regional conflicts
- Construct and interpret maps using fundamental cartographic principles to infer geographic relationships and features
- Use geographic knowledge to explain past, interpret the present, and anticipate future issues
- Apply basic tools for measuring macroeconomic performance, including GDP, price indices, and unemployment rates
- Use tables, graphs, diagrams, and charts to analyze economic information germane to current events
- Develop a personal mission statement incorporating personal values and beliefs

Answer most questions regarding the following *concepts*:

- the democratic and scientific revolutions as they evolved throughout the Enlightenment; and patterns of change during the 19th century era of imperialism
- the ideologies and outcomes of independence movements emerging third world countries
- the rise of nationalism and how the ethnic and ideological conflicts lead to WWI
- the principal theaters of battle, major turning points, and geographic factors in military decisions for the Allied victory of WWII, and the major international developments after the war
- the rise of totalitarianism and influence of world conflicts leading up to Soviet control of Eastern Europe, and the Mao and Chinese Revolutions

- the rights, protection, limits, and freedoms included in the Constitution and Bill of Rights with emphasis on the conflicts that arise between the rights
- the rights and obligations of citizens with emphasis on the connection between self-interest, the common good, and essential elements of civic virtue
- historical sources and ideals that have influenced the structures of government with emphasis on democracy by Greeks; essential principles of the Roman Republic; and individual rights in the English Bill of Rights
- the varied philosophies of government including Authoritarianism, Communism, Democracy, Oligarchy, Theocracy, Totalitarianism, Unitarian system, Confederal system, Federal system, and Parliamentary System
- failure of the Articles of Confederation, development of a federal system, and Federalist and anti-Federalist positions
- how African Americans, Native Americans, and women used activism to get the right to vote
- the workings of the Electoral College

Geography

- the economic, political, cultural, and social processes that interact to shape patterns of human population, interdependence, cooperation, and conflict
- policies and programs for resource management, including the trade-off between environmental quality and economic growth

Economics

- economic concepts germane to personal financial choices, with emphasis on consumer credit, simple vs compound interest, investment and savings, and discretionary and disposable income
- the effects of monetary and fiscal policies on inflation, unemployment, and economic growth
- how households and firms are interdependent and how their relationship is affected by trade, exchange, money, and banking
- the role of government in the mixed market economy of the United States with emphasis on revenue and spending choices of federal and state governments, and effects of progressive, proportional, and regressive income taxes on different income groups
- the effects of international commerce in the United States and other nations, with emphasis on the concepts of balance of trade; the effects of a technologically and service driven world economic policy; and how exchange rates affect international commerce

EXCEEDS:

The learner is able to:

<u>Consistently</u> demonstrate command of the basic *skills* of historical, geographical, and economic reasoning:

- Trace the development of an author's argument, viewpoint, or perspective in a historical account
- Examine different points of view on the same historical events and determine the context in which the statements were made, including the questions asked, the sources used, and the author's perspectives
- Compare and contrast past and present events to identify trends, evaluate consequences, and analyze lessons learned
- Draw personal predictions and conclusions on current events to explain how they are like or unlike past history and defend the position based on that past history
- Trace the impact of people, cultures, documents, and events from the past on current beliefs and values
- Apply the skills of historical analysis to current social, political, geographic, and economic
 issues facing the United States and the world, including the reasons for and impact of the
 nation's changing immigration policy, the persistence of poverty, the new world disorder and
 dangers; and modern regional conflicts
- Construct and interpret maps using fundamental cartographic principles to infer geographic relationships and features
- Use geographic knowledge to explain the past, interpret the present, and anticipate future issues
- Apply basic tools for measuring macroeconomic performance, including GDP, price indices, and unemployment rates
- Use tables, graphs, diagrams, and charts to analyze economic information germane to current events
- Develop a personal mission statement incorporating personal values and beliefs

Consistently answer questions regarding the following *concepts*:

- the democratic and scientific revolutions as they evolved throughout the Enlightenment; and patterns of change during the 19th century era of imperialism
- the ideologies and outcomes of independence movements emerging third world countries
- the rise of nationalism and how the ethnic and ideological conflicts lead to WWI
- the principal theaters of battle, major turning points, and geographic factors in military decisions for the Allied victory of WWII, and the major international developments after the war
- the rise of totalitarianism and influence of world conflicts leading up to Soviet control of Eastern Europe, and the Mao and Chinese Revolutions

- the rights, protection, limits, and freedoms included in the Constitution and Bill of Rights with emphasis on the conflicts that arise
- the rights and obligations of citizens with emphasis on the connection between self-interest, the common good, and essential elements of civic virtue
- historical sources and ideals that have influenced the structures of government with emphasis on democracy by Greeks; essential principles of the Roman Republic; and individual rights in the English Bill of Rights
- the varied philosophies of government including Authoritarianism, Communism, Democracy, Oligarchy, Theocracy, Totalitarianism, Unitarian system, Confederal system, Federal system, and Parliamentary System
- failure of the Articles of Confederation, development of a federal system, and Federalist and anti-Federalist positions
- how African Americans, Native Americans, and women used activism to get the right to vote
- the workings of the Electoral College

Geography

- the economic, political, cultural, and social processes that interact to shape patterns of human population, interdependence, cooperation, and conflict
- policies and programs for resource management, including the trade-off between environmental quality and economic growth

Economics

- economic concepts germane to personal financial choices, with emphasis on consumer credit, simple vs compound interest, investment and savings, and discretionary and disposable income
- the effects of monetary and fiscal policies on inflation, unemployment and economic growth
- how households and firms are interdependent and how their relationship is affected by trade, exchange, money, and banking
- the role of government in the mixed market economy of the United States with emphasis on revenue and spending choices of federal and state governments, and effects of progressive, proportional, and regressive income taxes on different income groups
- the effects of international commerce in the United States and other nations, with emphasis on the concepts of balance of trade; the effects of a technologically and service driven world economic policy; and how exchange rates affect international commerce

Behavioral Science Sample Activities*

Standard: The adult learner uses and applies social studies concepts in a variety of situations.

	Family	Workplace	Community
Pre- Literacy	Students describe emotions and what to do to feel better when they are in a bad mood. Writing PL B-2	Students discuss how to get along with difficult people. Why are people difficult?	Students discuss how one may act differently at other times and places.
ABE I	Students compare family members basic attitudes toward life; what determines attitude <i>Reading AEE I B-2, 3</i>	Students describe what makes pleasant working conditions. Writing ABE II B-1	Students discuss what attributes make a good role model, and describes their role models and how they have influenced them. Writing ABE II B-1, 3
ABE II	From a list of personality types, students identify traits and discuss with classmates different types and how/why one got to be like he/she is. Reading ABE II B-5	Students discuss what common values and beliefs they share with co-workers. Students collect company vision and mission statements from classmates. What do they have in common? What do they show about the people who work there? Reading ABE II C-1	Students list the clubs and organizations class members belong to (PTA, church, soccer, little league, block watch, etc.) What do these groups have in common? Who joins? Why? Math ABE II C-1A
ABE III	Students discuss how family values affect one's behavior. (church, education, work habits) Students compare values to those of a classmate – how are they different? Reading ABE III B-4	Students select a group at work: (union, lunch group, shipping dept. etc.) Students discuss what the people in that group show in the way of norms, values and beliefs. Does that affect their behavior? <i>Reading ABE III C-1</i>	Students discuss why people live in the neighborhoods they do. What would students like to change about their neighborhood? Compare students neighborhoods with previous one or with a classmate's. Writing ABE III B-2
ASE I/GED	Students discuss famous psychologists theories of personality development. (Adler, Maslow, Freud, Skinner). Students identify theory or components that agree with his/her observation of self and others. Give examples. Writing ASE I B-2	Students chart the increase in population of their community over the last 50 years. Why do people populate a particular area? Math ASE I B-1, 2	Students write an essay or stage a debate discussing the advantages and disadvantages of rural, urban and suburban communities. Writing ASE I B-1
ASE II	Students answer the following questions to help derive a personal mission statement: "What have been some of my greatest moments of happiness and fulfillment?"	Students discuss what activities they most enjoy in professional life? Least enjoy? What are the activities of most worth in their personal life? Least worth? What talents or capacities do they have or want to have? What steps must they take to get those they want?	Students discuss how they can best contribute to their community? Writing ASE II B-1

Economics Sample Activities*

	Family	Workplace	Community
Pre- Literacy	Students provided with scenario that requires a choice between buying gas for their car or taking a friend out for pizza. Students defend choices. <i>Reading ABE I B-6</i>	Students name the type and number of teaching-related products that the instructor uses in a class session to produce a lesson. Writing PL B-2	Students discuss what valuable resources they could offer a neighbor in exchange for babysitting so that they could come to class. Illustrate other barter interactions. <i>Reading ABE I B-4</i>
ABE I	Students think of at least two reasons why people in some less developed countries might want to have large families. Research population growth and poverty rates for various countries via the internet. Reading ABE I B-2	Students illustrate the circular flow model within a community beginning with an employer paying wages to the employee in exchange for her/his labor. Depict how money may eventually flow back to the employer through the employee's purchases or payments. Math ABE I B	As a classroom exercise students arbitrarily create a five product barter economy. Students map out how many exchange transactions each person would have to engage in to complete the assortment of goods he/she desires. Contrast this with a currency-based system. Math ABE I B-1
ABE II	Students discuss the variety of breakfast cereal choices available. They decide on product categories that most clearly differentiate their choices (hot/cold, kid/adult, boxed/bagged, store brand/national). Students observe and record the number of each category of cereal available where they shop. Students compare and contrast the results of their observations; discuss possible reasons for the differences. Math ABE II B	Students list the occupations held by their grandparents, parents, themselves and their siblings. As a class, they categorize these occupations as agricultural, industrial, services or technological in orientation. For each generation, they determine the percentage of individuals whose occupations fall into each category. Develop pie charts. Discuss class results and their implications. Use the Internet to research shifts in the distribution of occupational categories over the last 150 years. <i>Math ABE II B</i>	Through the Internet, students are provided with data on the median annual incomes in Arizona by gender, ethnicity, education level, etc. over the last 30 years. Students generate bar charts to compare the data. Discuss the potential causes of differences between demographic categories; discuss any observed trends. Math ASE I B-3
ABE III	Students role-play buyers and sellers in two car dealerships, one with a fixed price policy and the other which negotiates the price. Students discuss the advantages and disadvantages of each method. Reading ASE I B-6	Students interview at least six other employed people to determine what benefits their employers offer (health insurance, tuition reimbursement, etc.) They ask each respondent what effect each benefit has on his loyalty and satisfaction with that job. Reading ASE I B	Students compose a letter to a local official requesting information about resources and incentives offered to foster the creation of small businesses in the local community. Writing ASE II B-3

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ASE I/GED	 Economics/applied math exercise: Students compute simple interest on a credit card balance of \$ 2000 @ 13.5% for one year. Students compute compound interest (compounded monthly) for the same period. Students determine what is beneficial to the consumer vs. the lender. Students discuss "hidden fees" such as late charges and separate interest rates for cash advances etc. Math ASE I C 	Students read personal narratives regarding life in the Great Depression (excerpts from Studs Terkel's book <i>Hard Times</i>). On the basis of such a narration, students discuss the economic and non-economic effects of unemployment. *Reading ASE I C-1*	Students use the Internet to locate data on federal budgets over the last 50 years. Discuss the relationship between the distribution of federal expenditures and the political party affiliations of various administrators. Math ASE I A-3
ASE II	Students distribute pamphlets defining and describing the benefits and risks of various financial instruments. Alternatively, invite a representative from a financial institution to speak to the class about various investment instruments they provide. Reading ASE I B-8	Students list countries of origin for selected household items. Students discuss the impact of foreign made articles on the American worker. <i>Reading ASE II B-1,5</i>	Students determine the number, type and structure of taxes paid by individual residents. Compile data by student's home communities; classify these taxes as progressive, proportionate and regressive. Math ASE I B-1

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Geography Sample Activities*

	Family	Workplace	Community
Pre- Literacy	Students: • Give directions to family member from home to school/store • List relatives and where they were born, finding those locations on a map • Play "Simon Says" using directional words and phrases *Reading PL B-1	Students give directions from front door to work station. Reading PL B-1	Students collect maps of community and compare older ones to newer ones. Students survey classmates as to where their parents were born and locates these places on a map. Math PL B-1a
ABE I	Students draw floor plan of home. Students locate the same point on several different maps and a globe (state, country, world). Math ABE I E-1	Students draw floor plan of work place including escape routes in case of fire or other emergency. Reading ABE I B-2,3	Students discuss natural resources (e.g., water) and how their availability affects a community. Students discuss the topography of Arizona, locate physical features on a map, and use map key to calculate distance and elevation. Math ABE II E-2, 5
ABE II	Students draw a map of their neighborhood using symbols for stores, parks, churches, hospitals, homes, etc. Students use the phone book to look up names and addresses of friends. Reading ABE II B-6	Students identify which materials in the workplace can be conserved, reused, and recycled and what natural resources will be conserved as a result. Students use the phone book to look up names and addresses of potential employers. Reading ABE B-4,5,6	Using a map of one's town, students calculate the distance from home to school, both on major roads and as the crow flies, using the scale of the map. Math ABE III E-1a, 2d Students use the phone book to look up names and addresses of community services or locations. Reading ABE II B-6
ABE III	Using a map of Arizona, students plan alternative routes from home to a favorite vacation area for speed or arrival, most scenic, most availability of gas stations, etc. Math ABE III B-1c	Observing a map of Phoenix, Tucson, Flagstaff and/or Arizona, students identify the natural and man-made features that allow business/homes to exist in one area and not another. Math ABE III B-1b, c	Recognizing that the population of Phoenix, Tucson, Flagstaff (or their town) is growing, students describe the causes and effects of the migration of people to the area. Writing ASE I B-2

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ASE I/GED	After World War II, Japanese families raised flowers for the florist market along Baseline Road in Phoenix. Students discuss why they and other farmers (cotton) are no longer producing these products in the same quantities. Writing ASE I B-2	On a map of the world, students pinpoint where different products used in the workplace originated. <i>Reading ASE I B-5</i>	Students discuss the ethnic composition of their neighborhood. Who lives there; where did they come from; why did they come? What situation in their home country caused them to relocate? Writing ASE I B-2 Students plot distances using longitude and latitude to locate distant places. Math ASE I D-1d
ASE II	Students discuss how geography has influenced their family and its history and why they live where they do now. Reading ASE II B-1,3 Writing ASE I B-3	Students give an example of former resource management (burning of crop residue, burying chemical wastes/trash, mining without reclamation, use of chemical fertilizers and pesticides). Students discuss why these practices are no longer allowed and the costs to the producer and consumer. Writing ASE II B-3	Students draw a map of their neighborhood to scale and color codes for land use (residential, commercial, park). Math ASE I B-1

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Political Science and Civics Sample Activities*

	Family	Workplace	Community
Pre- Literacy	Students describe where one's family came from; why they came to the US and notes different beliefs, traditions, foods, etc. <i>Writing PL B-2</i>	Students describe the rules and regulations at the place they works: Who makes the rules? What happens if one breaks the rules? Can the rules be changed? Who changes them? Writing ABE II B-1	Students describe the neighborhood in which they lives. What ethnic groups live there? Writing ABE II B-1
ABE I	Students discuss how decisions are made in family groups; compare and contrast with how decisions were made when they were growing up. Reading ABE II B-1,5	Students describe the management/supervision structure at place of work. Reading ABE I B-3	Students list the major politicians in the local state and national government. Reading ABE I B-1, 7 Writing PL B-2, Writing ABE II B-1
ABE II	Students discuss <i>Patients Bill of Rights</i> ; write a paragraph describing how it could change their lives. Writing ABE I B-6	Students write a paragraph discussing work values: How are they different from colonial times? How would the workplace be different without the <i>Bill of Rights</i> ? Writing ABE III B-2, ABEII B-3	Students write a "Bill of Rights" for today in their city and neighborhood, discuss what should be included. Writing ABE I B-1
ABE III	Students discuss the Bill of Rights, and write a paragraph for each describing which, in their opinion, is the most important, least important. Writing ASE I B-2	Students compare and contrast the students' work environment with that of the roles of Federal, State and Local government: What specific types of laws affect them? Reading ASE I B-2	Students design a referendum or initiative; investigate the process; create a flow chart showing the process. Students discuss potential positive and negative aspects. Writing ASE I B-2
ASE I/GED	Students investigate sales tax issues, who taxes what? At what level? (State vs. federal) Writing ASE II B-1	Students research what regulations are imposed at their place of work: Where did they come from-local, state or federal? Students create a table showing these regulations. Writing ASE II B-1	Students are polled to see if they vote. Students discuss the importance of voting. Students write a persuasive essay for or against voting. Instructor invites a lawyer to speak about the <i>Constitution</i> and the amendments in regards to law. Writing ASE I B-1 Math ASE I B-2
ASE II	Students investigate how the duties of parenting are similar to the <i>Constitution</i> and the <i>Bill of Rights</i> . Writing ASE I B-2	Students compare and contrast the struggle of unions to the struggle for voting rights by African Americans, Native Americans and women: Who helped? Who hindered? Reading ASE C-2	Students conduct a mock election; students campaign for positions. Instructor arranges for an elected official to talk about campaigning and public offices. Writing ASE B-1, Math ASE B-2

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

History Sample Activities*

	Family	Workplace	Community
Pre- Literacy	Students list in priority order all the modern conveniences important to families; how would their elimination affect families' lives? Writing PL B-2	Students tell about conveniences important to a workplace; how would their elimination affect products or services? Reading ABE I B-5	Students discuss favorite leisure-time activities, and talk about what local businesses have arisen because people have more leisure time. Reading ABE I B-2
	Students tell about family members from other generations who had an interesting personal experience. Tell what they did and why. <i>Writing ABE II – B-1, 2, 3</i>	Students tell about work experiences that show how people's differing motivations can come into conflict. Reading ABE I B-2	Students tell about a local "hero" or admirable person, what he/she did and why. What about a non-admirable person? <i>Reading ABE I B-7</i>
ABE I	Students take a trip to a local museum, see a video, or listen to a speaker on early Native American culture in Arizona. Students list contributions from ancient cultures still in use in the home. Writing ABE II B-5 Students share a family heirloom, picture or other object and explains the story behind it. Reading ABE II B-6	Students take a trip to a local museum, see a video, or listen to a speaker on early Native American culture in Arizona. Students list contributions from ancient cultures still in use in the workplace. Writing ABE II B-1,5 Students arrange old news clippings and historical pictures from local businesses on a timeline, noting differences and similarities. Reading ABE II B-6	Students study local street and building murals; compare and contrast their purpose to ancient Arizona petroglyphs. Reading ABE II B-5 Students use the telephone book and personal observation to research names of local buildings and streets named from famous people. Reading ABE I B-3
ABE II	Students analyze how spectator sports and sports heroes today are an outgrowth of early empires' notions of heroism (Roman charioteers, Greek athletes). Writing ABE III B-2 Reading ABE II B-4 Students describe the experience of moving to a new country, either through personal experience or by interviewing others. Writing ABE III B-3	Students compare and contrast the qualities of an "effective" business leader today with one in the early 1900's. Reading ABE I B-4 As a worker in the needle trades in the early 1900s, students write a letter to family telling them about work life in the sweatshop. Writing ABE III B-3	Students examine clothing worn by persons of power (military, religious, royalty, politics, business), and identify the indicators of that power. Reading ABE III B-6 Students read the latest census chart and graphs the ethnic groups and religions represented by the people of the community. Instructor invites a speaker or historian to speak on why they immigrated, how they acclimated, etc. Math ABE III B-1

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ABE III	Students analyze the types and effects of financial stressors on today's families; predict how these might change if the United States had a depression or high inflation. Math ASE I B-1 Students list ways in which early settlers bartered for good and services and discuss how families use bartering today. Writing ABE II B-1	Students research the Social Security System; explain how it works for retirement, disability, and death benefits; how it is shown on a pay stub. Students write to Social Security Administration to find out what their estimated retirement income would be. Writing ASE II B-1 Students research the goods and geography of United States trade in the 1800s, 1900s, and today, and analyze the differences. Writing ASE II B-1	Students construct interview questions to ask a person about how life in the community changed during the depression and then conduct the interview. Writing ASE II B-1 Students graph the growth of colonial cities' populations (e.g., Boston, New York) from colonial times to present. Students compare to the growth of Arizona cities from their founding to the present and discuss what historical factors account for the population changes and shifts. Math ABE III B-1
ASE I/GED	Students research local news articles from World War II, Korean War and/or Vietnam War to gather evidence of effects on families. <i>Reading ASE I B-7</i> Students compare and contrast personal philosophies of Martin Luther King (<i>I Have a Dream</i>) and Malcolm X (<i>The Ballot or the Bullet</i>). Students imagine living then and discuss which parts of the speeches they would agree with most <i>Reading ASE I B-8</i> Students design a collage to illustrate how the Bill of Rights impacts or has impacted their lives. Share with the class. <i>Reading ASE I B-8</i>	Students research and report on how World War II affected labor availability in the local area, especially male-traditional jobs that were taken over by women. Reading ASE I B-7 As a European industrialist in Africa, students write a letter to the news editor or draw a "muckraking" political cartoon persuading as to the benefits of colonialism for African people. Writing ASE I B-1 Students discuss how the labor struggle and boycott led by Cesar Chavez related philosophically to both the American and Mexican Revolutions (3/1/66 Speech to Striking Grape Workers). Students describe what Constitutional principles formed the foundation of the US Labor Movement. Reading ASE I B-2	Students research the construction of and acquisition of items for the USS Arizona War Memorial at the Arizona State Capitol, (and other local war memorials) and analyze the importance of such symbols to the community. Writing ASE I B-2 Students read the United Nations Declaration of Human Rights and debate the current United States policy of sending military troops into third world countries to protect human rights. Reading ASE I B-5,6 Students summarize the landmark Supreme Court case Brown v. Board of Education and apply the Constitution and a historical perspective to tell how students would have voted as Supreme Court members Reading ASE I B-5,6

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ASE II

Students interpret the words of "life, liberty and the pursuit of happiness" in terms of one's personal rights and responsibilities to family, friends and community.

Writing ASE II B-3

Students write sympathetic responses to the poetry and prose on the Israeli-Palestinian issue (After the First Rain? Israeli Poems on War & Peace and Memory for Forgetfulness: August Beirut).

Reading ASE II C-6

Students explain how the early American concept of Manifest Destiny was not viewed as a violation of the rights of Native Americans and its direct link to the current issue of Native American poverty and unemployment. Instructor invites a tribal representative to speak on the success/benefits of Indian gaming and the growth of on-reservation business enterprises.

Reading ASE I B-5

Students research and create a map showing the manufacturing locations of the largest United States multi-national corporations (i.e., Ford, Coke, Motorola, etc.) Students report on whether any large Arizona corporations manufacture outside of the United States. Students discuss whether this takes jobs away from citizens.

Students research the life and art of Vincent Van Gogh, particularly how he may have been mentally ill and thus viewed as "different" by society (expressed in the lyrics to *Vincent* by Don McLean). Students describe if it is possible to change people's prejudices about people with disabilities or who are "different" in other ways. Students discuss how the local community can insure that people with disabilities achieve full equality.

Writing ASE II B-1

Students compare and contrast the reasons for the fall of Rome to the breaking apart of the Soviet Union in 1991.

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Glossary of Social Studies Terms

amendment (Constitutional) – change in or addition to a constitution

Articles of Confederation – the first constitution of the United States (1781)

attitude – a manner showing one's feelings or thoughts

balance of payments – a record of all economic transactions between the residents of a country and those of foreign countries for a one-year period

balance of trade – the difference between the total amount of exports and imports for a country in one year

barter – the direct exchange of one good or service for another without the use of money

belief – conviction that certain things are true

bicameral – a legislative body composed of two houses

Bill of Rights – the first ten amendments to the Constitution; these amendments limit governmental power and protect basic rights and liberties of individuals.

bureaucracy – administrative organizations that implement government policies

business cycle – the periods of recession and expansion that an economy goes through because production does not increase continuously over time

Cabinet – secretaries or chief administrators of the major departments of the federal government

capital – manufactured resources such as tools, machinery, and buildings that are used in the production of other goods and services

cartography - the science of making maps

checks and balances – the Constitutional mechanisms that authorize each branch of government to share powers with the other branches and thereby check their activities

circular flow model – a diagram showing how households, firms and the government are interdependent

- **citizen** a member of a political society who owes allegiance to the government and is entitled to its protection
- **civil rights** the protection and privileges of personal liberty given to all US citizens by the Constitution and the Bill of Rights
- **command economy** economic system where the resources are state owned and their allocation and use is determined by the centralized decisions of a planning authority
- **communism** a system of government where the state owns resources and determines their allocation and use
- **comparative advantage** the idea that countries gain when they produce those items that they are most efficient at producing
- **competitive behavior** when a business or individual acts in a self-interested way intending to increase wealth
- **concurrent powers** powers that may be exercised by both the federal and state governments
- **consumer** a person or organization that purchases or uses a product or service
- **culture** the learned behavior of people, such as belief systems and languages, social relations, institutions, organizations, and material goods such as food, clothing, buildings, technology
- **deflation** general lowering of prices
- **demand** how much a consumer is willing and able to buy at each possible price
- **democracy** the practice of the principle of equality of rights, opportunity, and treatment
- **demographics** the statistical characteristics of human populations (as age or income) used especially to identify markets
- **diffusion** the spread of people, ideals, technology and products between places
- **economic growth** an increase in an economy's ability to produce goods and services that brings about a rise in standards of living
- **economics** the social science that examines the change process and the allocation of scarce resources

- **emotions** any specific feeling as love, hate, fear, anger, etc.
- **exchange** the process of obtaining a desired product from someone by offering something a value in return
- **gross domestic product** a measure of how much an economy produces each year, stated in the dollar value of final goods and services
- **group norms** a principle of right action binding upon the members of a group and serving to guide, control or regulate proper and acceptable behavior
- **inflation** a general rise in the level of prices
- **latitude** angular distance north or south from the earth's equator measured through 90 degrees
- **longitude** the arc or portion of the earth's equator intersected between the meridian of a given place and the prime meridian expressed in either degrees or time
- **macroeconomics** the branch of economics dealing with the economy as a system and decision making of large institutions such as governments or unions
- market economy economic system in which supply, demand and the price system help people make exchange decisions and allocate resources (Free enterprise economy)
- **microeconomics** the branch of Economics dealing with behavior and decision making of small units such as individuals or firms
- **migration** to move from one country, place or locality to another
- **mixed economy** a free enterprise market economy in which individuals carry on their economic decision making relatively freely, but are subject to some governmental regulations and intervention
- **monarchy** a type of government in which a single ruler under the claim of divine or hereditary right exercises political power
- **moods** a particular state of mind or feeling
- **natural resources** those forms of wealth supplied by nature, as land, minerals, water, power, etc.
- **opportunity cost** something is given up in order to have something else; the cost of the next best alternative use of scarce resources (such as money and time) when one choice is selected over another.

- **personality** distinctive individual qualities of a person, considered collectively
- **prejudice** a preconceived, usually unfavorable idea; an opinion held in disregard of facts that contradict it; bias
- **progressive tax** a tax structure where people who earn more are charged a higher percentage of their income
- **proportional tax** a tax structure where all people pay about the same percentage of their income in taxes
- **price** the amount of value that individuals must forgo in exchange for a desired product
- **protectionism** the practice of protecting domestic industries from foreign competition by imposing import duties or quotas
- **quota** a limit on how much of a good can be imported
- **referendum** a form of direct democracy in which citizens of a state, through gathering signatures, can require that a legislative act come before the people as a whole for a vote
- **regressive tax** a tax structure where people who earn more pay a smaller percentage of their income in taxes
- **representative democracy** a form of government in which power is held by the people and exercised indirectly through elected representatives who make decisions
- **republic** a system of government in which power is held by the voters and is exercised by elected representatives responsible for promoting the common welfare
- **resources** land, labor, capital, and entrepreneurship used in the production of goods and services
- **return** how well you do by investing in one asset as opposed to another
- risk how much uncertainty accompanies your choice of investment
- scale the relationship between a distance on the ground and the distance on the map
- **scarcity** the central concern of Economics: the condition caused by individuals' unlimited wants in the face of limited resources
- **separation of powers** the division of governmental power among several institutions that must cooperate in decision-making

specialization – the assignment of tasks so that each worker performs limited functions more frequently, the division of labor

standard of living – the overall quality of life that people enjoy

suffrage – the right to vote

supply – the schedule of quantities offered for sale at all possible prices in a market

tariff – a tax on an imported good

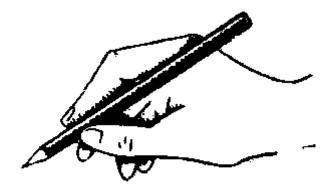
theocracy – any government in which the leaders of the government are also the leaders of the religion and they rule as representatives of the deity

totalitarianism – a centralized government that does not tolerate parties of differing opinion and that exercises dictatorial control over many aspects of life

United Nations – an international organization comprising most of the nations of the world, to promote peace, security, and economic development

urbanization – the processes whereby more people live and work in cities

WRITING STANDARDS



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- Performance Standards
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Writing

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Standard: The adult learner uses written language to communicate in a variety of situations.

Pre-Literacy

Indicator A: Applies correct spelling, punctuation, capitalization, grammar and usage rules to complete a variety of writing tasks

- 1. Writes (print and cursive) upper-and lower-case letters of the alphabet
- 2. Write and spells familiar words
- 3. Capitalizes the first word in a sentence and people's name

Indicator B: Applies the writing process to complete a variety of writing tasks

- 1. Completes name, address, phone number, date, and social security number on simple forms
- 2. Writes lists organized with a clear purpose

ABE I

Indicator A: Applies correct spelling, punctuation, capitalization, grammar and usage rules to complete a variety of writing tasks

- 1. Spells words commonly used at this level
- 2. Punctuates sentence endings
- 3. Identifies and exhibits correct use pronouns
- 4. Exhibits correct usage of apostrophes in contractions
- 5. Identifies subject and predicate in very simple sentences
- 6. Exhibits correct usage of periods and questions marks as ending punctuation
- 7. Identifies adjectives in simple sentences
- 8. Capitalizes proper nouns and beginning of sentences

Indicator B: Applies the writing process to complete a variety of writing tasks

- 1. Writes a well-organized and easy-to-follow series of at least five directions on how to accomplish a task
- 2. Completes the essential information on a simple job application

ABE II

Indicator A: Applies correct spelling, punctuation, capitalization, grammar and usage rules to complete a variety of writing tasks

- 1. Spells words commonly used at this level
- 2. Uses resources to find out how to spell unfamiliar words
- 3. Uses period to punctuate abbreviation
- 4. Uses commas to punctuate words in a series, dates, compound sentences
- 5. Uses apostrophes to show possessives and contractions
- 6. Uses capitalization in titles, the first word in a direct quote, names of organizations, titles and specific school subjects most of the time
- 7. Applies standard grammar and usage to subject/verb agreement, simple past, present, and future continuous verb tense
- 8. Spells plural nouns
- 9. Uses common comparative and superlative adjectives
- 10. Uses common comparative and superlative adverbs
- 11. Uses demonstrative and possessive pronouns
- 12. Avoids sentence fragments and run-on sentences

Indicator B: Applies the writing process to complete a variety of writing tasks

- 1. Applies pre-writing tools to generate topics and/or planned writing tasks (e.g., brainstorming, clustering, outlining, listing, webbing)
- 2. Revises the first draft identifying and correcting spelling, punctuation, capitalization, sentence fragments, run-on sentences, and grammar and usage mistakes
- 3. Writes a paragraph of approximately 75 words on a topic of own choosing, including a topic sentence followed by details to support the main idea
- 4. Writes a dialogue of at least ten sentences that uses descriptive words and phrases to develop ideas and advance characters
- 5. Writes a report of at least 50 words that summarizes a research project and includes a chart, table or graph
- 6. Completes a job application

ABE III

Indicator A: Applies correct spelling, punctuation, capitalization, grammar and usage rules to complete a variety of writing tasks

- 1. Spells words commonly used at this level
- 2. Punctuates using commas and quotation marks
- 3. Applies rule of capitalization in quotes and letters
- 4. Applies standard usage to common homonyms
- 5. Identifies and uses basic parts of speech: verbs, nouns, pronouns, adjectives, adverbs, conjunctions, prepositions, and interjections
- 6. identifies and uses modifiers most of the time

Indicator B: Applies the writing process to complete a variety of writing tasks

- 1. Writes a three-paragraph descriptive narrative (approximately 100 words on a topic of choice), using simple and compound sentences that develop a story line in a clear sequence; uses figurative language or descriptive words and phrases
- 2. Writes a three-paragraph expository essay (approximately 100 words) on a given topic using simple and compound sentences that states a thesis and includes an introductory paragraph, developmental paragraph, and concluding paragraph with appropriate facts, details, examples and descriptions
- 3. Writes an appropriate friendly letter of at least 50 words that uses a heading, salutation, and closing, expresses ideas that are clear and directly related to the topic, and are appropriate to the specific audience

ASE I/GED

Indicator A: Applies correct spelling, punctuation, capitalization, grammar and usage rules to complete a variety of writing tasks

- 1. Spells common words used at this level
- 2. Demonstrates use of a thesaurus
- 3. Punctuates using comas, colons and semicolons
- 4. Applies rules of capitalization
- 5. Applies standard grammar and usage to:
 - a. Combine simple sentences into compound and complex sentences
 - b. Construct conditional clauses
 - c. Avoid problems with subject-verb agreement
 - d. Avoid dangling modifiers

Indicator B: Applies the writing process to complete a variety of writing tasks

- 1. Writes a persuasive essay of at least 200 words that contains effective introductory and summary statements with evidence of a point of view and argues effectively with full-developed ideas of proof or example
- 2. Write an expository essay of at least 200 words that clearly states and develops a thesis with supporting details from a variety of credible sources, using strategies such as cause and effect or comparison and contrast
- 3. Writes a personal narrative of at least 200 words that develops a story line in meaningful sequence, describes events and characters to convey a theme or tone, and includes descriptive details and concrete language

ASE II

Indicator A: Applies correct spelling, punctuation, capitalization, grammar and usage rules to complete a variety of writing tasks

- 1. Spells words commonly used at this level
- 2. Creates possessive forms of nouns or pronouns with gerunds
- 3. Applies standard grammar and usage to:
 - a. Parallel structure
 - b. Modifiers
 - c. Compound verbs and past participles
- 4. Applies rules of capitalization
- 5. Demonstrates use of all punctuation marks
- 6. Identifies and uses conjunctive adverbs
- 7. Uses a thesaurus

Indicator B: Applies the writing process to complete a variety of writing tasks

- 1. Completes a research project using reference materials and research technique to craft a written report of at least 200 words that:
 - a. Paraphrases information from given resources
 - b. Develops a thesis and a clear point of view
 - c. Uses personal interpretation, analysis, evaluation, or reflection as evidence of comprehensive understanding of the subject
 - d. Records relevant statistical information in graph or table form
 - e. Contains credible supporting information (facts, details, and examples) from a variety of cited sources
- 2. Completes a resume including current personal information, education, jobrelated skills, work experience, personal interests and at least three references
- 3. Writes a business letter of at least 100 words using heading, salutation and closing and establishes a clear purpose and organizational pattern for a specific audience

- 6 -

Writing Performance Standards

Pre-Literacy

Beginning

The student:

- writes 0 7 letters of the alphabet (prints legibly)
- spells 0 5 of the first 20 words (using the "Three Hundred Most Frequently Used Words in Rank Order" List)
- follows only a few instructions
- provides only limited information on a form
- copies lists of words and phrases pertaining to 2 out of 5 pictures

Approaching

The student:

- writes 8 14 letters of the alphabet (prints legibly)
- spells 6 10 of the first 20 words (using the "Three Hundred Most Frequently Used Words in Rank Order" List)
- capitalizes the pronoun "I" most of the time
- provides basic information which is 50% complete and accurate
- follows instruction although not consistently
- accurately copies lists of words and phrases pertaining to 4 out of 7 pictures
- creates short lists that have a general purpose most of the time

Met

- writes 15-21 letters of the alphabet (prints legibly and uses cursive writing)
- spells 11 15 of the first 20 words (using the "Three Hundred Most Frequently Used Words in Rank Order" List)
- capitalizes the pronoun "I", first words in sentences, and people's names most of the time
- follows most instructions
- provides complete and accurate information most of the time
- accurately copies lists of words and phrases pertaining to 6 out of 9 pictures
- creates organized lists that have a clear purpose most of the time

Exceeds

- writes 22-25 letters of alphabet (print and cursive)
- spells 16-20 of the first 20 words (using the "Three Hundred Most Frequently Used Words in Rank Order" List)
- capitalizes the pronoun "I", people's names, and the first words in sentences almost all of the time
- follows instructions consistently
- provides thorough and highly accurate information consistently
- accurately copies lists of words and phrases pertaining to 8 out of 10 pictures
- creates organized lists that have a clear purpose consistently

ABE I

Beginning

The student:

- spells 21 50 of the words on the "300 Most Frequently Used Word" List
- identifies and uses pronouns he, she and it most of the time
- uses questions marks most of the time
- makes and uses plurals of simple nouns ending in "s" most of the time
- writes directions that are often not clear or sequential
- writes directions that are hard to follow
- completes a job application that:
 - provides accurate personal information (name, address, SSN, phone number, date of birth, and current date)
 - fails to include other essential information
 - reflects a failure to follow directions

Approaching

- spells 51 80 of the words on the "300 Most Frequently Used Word" List
- uses question marks at the end of a question and periods at the end of a sentence most of the time
- identifies and uses pronouns they and we most of the time
- identifies and uses linking verbs (is, are, am, were and was) most of the time
- capitalizes names of places most of the time
- applies standard usage to singular and plural nouns some of the time
- writes directions that are often sequential but still somewhat unclear
- writes directions that are often lacking in details
- completes a job application that provides 60 percent of the information accurately
- completes a job application that often lacks detailed information on work experience

Met

The student:

- spells 81 110 of the words on the "300 Most Frequently Used Word" List
- identifies subject and predicate in sentences most of the time
- identifies and uses adjectives in simple sentences such as those relating to color and size most of the time
- capitalizes brand names and titles (e.g., Mr., Mrs., Dr., etc.) most of the time
- capitalizes some proper nouns
- uses apostrophes in simple contractions (e.g., can't, aren't, isn't, don't, I'm) some of the time
- applies standard usage to singular and plural nouns most of the time
- writes directions that are often sequential and easy to follow
- writes directions that are often accompanied with sufficient details
- completes a job application that:
 - provides 75 percent of the information accurately
 - provides past and/or present work experience relevant to job requirements
 - includes adequate details in order to get the point across

Exceeds

- spells 110 150 of the words on the "300 Most Frequently Used Word" List
- identifies and uses simple subjects and action words as predicates in sentences almost all of the time
- uses apostrophes in simple contractions (e.g., can't, aren't, isn't, don't, I'm) most of the time
- capitalizes most proper nouns
- writes directions that are almost always sequential and easy to follow
- writes directions that are almost always accompanied with clear and detailed instructions to complete the task
- completes a job application that provides 90 percent of the information accurately
- completes a job application that provides past and present work experience relevant to job requirements that is well organized, detailed and relevant

ABE II

Beginning

The student:

Grammar and Usage:

- spells 151 175 of the words on the "300 Most Frequently Used Word List"
- uses periods to punctuate common abbreviations most of the time
- uses exclamation points in an exclamatory statement most of the time
- capitalizes dates, months, and days of the week some of the time
- uses apostrophes in simple contractions (e.g., it's, shouldn't, won't, couldn't, haven't) most of the time
- identifies and uses present continuous verb tense (e.g., am watching, are doing) some of the time
- uses dictionaries to find out how to spell some unfamiliar words
- constructs simple sentences some of the time

Writing Process:

- elects a topic and purpose for writing
- outlines appropriately
- prepares a preliminary draft
- when filling out a job application, is able to:
 - provide accurate personal information
 - follow some instructions
 - describe work experience, but it is neither complete nor logically sequenced
- writes paragraphs characterized by:
 - unclear or undeveloped ideas and insufficient details
 - marked lack of organization
 - little audience awareness
 - word choice that is repetitious or imprecise
 - a significant number of awkward, choppy, or rambling constructions
 - frequent, significant errors that impede readability

Approaching

The student:

Grammar and Usage:

- spells 176 205 of the words on the "300 Most Frequently Used Word List"
- uses commas in dates and series most of the time
- uses apostrophes in singular and plural possessives some of the time

- capitalizes dates, months, and days of the week most of the time
- constructs plurals of simple nouns ending in "s" and "es" most of the time
- identifies and uses past tense of regular verbs most of the time
- identifies and uses present continuous verb tense (i.e., am watching, are doing) most of the time
- uses dictionaries to find out how to spell many unfamiliar words
- identifies and uses possessive pronouns (my, hers, his, its, ours, yours, theirs, mine) most of the time
- writes complete sentences and avoids fragments (lack of a subject or predicate) some of the time

- elects a topic and purpose for writing
- outlines appropriately
- prepares a preliminary draft
- sequences information appropriately
- groups like ideas
- revises the preliminary draft to improve content and sequence
- when filling out a job application is able to:
 - complete 65 percent of it correctly
 - describe past and/or present work experience although it lacks proper details
 - use Standard English although errors interfere with getting the point across
- writes paragraphs characterized by:
 - some evidence of planning, although the development may be insufficient
 - an easily identifiable purpose and main ideas although they tend to be overly broad and simplistic
 - supporting detail that tends to be limited to a listing or a repetition of ideas
 - an organization and structure that is inconsistent or skeletal although some relationship among ideas is present and transitions sometimes work
 - an occasional sense of the writer behind the words; however, the voice tends to shift and lapse into the mechanical
 - language and word choice that is accurate but quite ordinary and lacking in precision and variety
 - good control over simple sentence structures, but little control over more complex structures
 - some passages that invite fluid oral reading and others, though functional, lack energy
 - repeated weaknesses in the conventions of Standard Written English and errors in grammar and usage that do not block meaning but do distract the reader

Met

The student:

Grammar and Usage:

- spells 206 225 of the words on the "300 Most Frequently Used Word List"
- uses commas in dates, series, and compound sentences most of the time
- uses apostrophes in singular and plural possessives most of the time
- identifies and uses simple, common comparative and superlative adjectives most of the time
- identifies and uses adverbs indicating how (e.g., *quickly*), how much (e.g., *very*), when (e.g., *suddenly*), and where (e.g., *anywhere*) most of the time
- identifies and uses demonstrative pronouns (e.g., this, that, these, and those) most of the time
- identifies and applies simple subject/verb agreement using active verbs most of the time
- identifies and uses present, past and future continuous verb tense (e.g., am watching, are doing, were doing, was sleeping, will be doing, will be studying) most of the time
- identifies and uses comparative and superlative adverbs (e.g., *better and best or worse and worst*) most of the time
- writes complete sentences and avoids fragments and run-on sentences most of the time

- elects a topic and purpose for writing
- outlines appropriately
- prepares a preliminary draft
- sequences information appropriately
- groups like ideas
- revises the preliminary draft to improve content and sequence and correct punctuation, usage, spelling and sentence structure as indicated above
- when filling out a job application, is able to:
 - complete 85 percent of the application
 - make a maximum of two errors in Standard English
 - sequence past and/or present work experience
 - provide clear, appropriate, supporting details
 - fulfill requests for relevant and additional information in a manner that is complete, clear and organized
- writes paragraphs characterized by:
 - clear and focused ideas and supporting details that are adequate and relevant although they may be overly general or limited in places
 - an organizational plan that is coherent and clear and helps the reader, despite some weaknesses or predictability

- a sense of audience and a voice that is sometimes expressive, engaging or sincere
- phrases and sentences that demonstrate relationships between the ideas expressed
- words that are functional and appropriate to audience and purpose although there are only rare attempts to experiment with language
- a natural sound and sentences that vary in structure, length and beginnings
- only occasional lapses in correct grammar and usage that are not severe enough to interfere significantly with the writer's main purpose or confuse the reader
- the need for only moderate editing

Exceeds

The student:

Grammar and Usage:

- spells 226 300 of the words on the "300 Most Frequently Used Word List"
- identifies and uses past tense of regular verbs and present and future active verbs almost all of the time
- identifies and uses irregular nouns (e.g., child children) almost all of the time
- uses apostrophes in singular and irregular plural possessives almost all of the time
- identifies and uses singular and plural reflexive pronouns (*myself, yourself, himself, herself, itself, ourselves, yourselves, and themselves*) almost all of the time
- constructs compound and complex sentences and avoids double negatives almost all of the time

- elects a topic and purpose for writing
- outlines appropriately
- prepares a preliminary draft
- sequences information clearly and appropriately
- groups like ideas
- revises the preliminary draft focusing on content and sequence
- submits a clear and coherent final draft
- when filling out a job application, is able to:
 - complete 95 percent of the application accurately
 - make a maximum of two errors in Standard English
 - provide clear, concise supporting details
- writes paragraphs characterized by:
 - clear focused and interesting writing that holds the reader's attention
 - relevant and carefully selected details that provide strong, accurate, credible support for major points
 - an organization that is clear and appropriate and enhances the central ideas

- and moves the reader through the text
- smooth, effective transitions among all elements (sentences, paragraphs and ideas)
- a strong sense of audience and a voice that shows originality, liveliness, honesty, conviction, excitement, or humor as appropriate
- vocabulary that is striking and varied, but natural and accurate and purposeful
- writing that has an easy flow and rhythm and variation in sentence structure, length, and beginnings that add interest to the text
- strong control of standard writing conventions with little need of editing

ABE III

Beginning

The student:

Grammar and Usage:

- spells 1 30 words of the "Master List of Most Frequently Misspelled Words"
- uses commas in addresses, name of places, and with people's titles most of the time
- identifies and uses common homonyms some of the time
- identifies and uses verbs and nouns as parts of speech most of the time
- identifies and uses objective pronouns (e.g., me, you, him, her, it, and them) most of the time
- identifies and uses prepositions (e.g., at, before, by, for, from, in, into, of, on, to, with, above, between, near, through, and under) most of the time
- identifies and uses conjunctions (e.g., and, but, yet, or, nor, for, and so) most of the time

- writes friendly letters and descriptive, narrative, expository compositions (including essays of explanation and comparison and contrast) of at least three (3) paragraphs, using a selected topic and with a specific purpose
- writes friendly letters and short compositions characterized by:
 - unclear or undeveloped ideas and insufficient details
 - marked lack of organization (introductory, middle and concluding paragraphs)
 - little audience awareness
 - word choice that is repetitious or imprecise
 - some irrelevant information
 - a significant number of awkward, choppy, or rambling constructions
 - frequent, significant errors that impede readability

Approaching

The student:

Grammar and Usage:

- spells 31- 61 words of the "Master List of Most Frequently Misspelled Words"
- identifies and uses common homonyms most of the time
- identifies and uses verbs, nouns, pronouns and adjectives most of the time
- uses commas in a series of adjectives most of the time
- uses quotation marks in direct quotes most of the time
- capitalizes the first word in a direct quote, names of organizations, titles and specific school subjects most of the time
- identifies and uses prepositional phrases most of the time
- uses conjunctions in pairs (e.g., both/and, not only/but also, either/or, and neither/nor) most of the time

- writes friendly letters and short compositions characterized by:
 - some evidence of planning, although the development may be insufficient
 - easily identifiable purpose and main ideas although they tend to be overly broad or simplistic
 - supporting detail that tends to be limited to a listing or a repetition of ideas
 - an organization and structure that is inconsistent or skeletal although some relationship among ideas is present and transitions are sometimes work
 - an occasional sense of the writer behind the words but the voice tends to shift or lapse into the mechanical
 - language and word choice that is accurate but quite ordinary and lacking in precision and variety
 - good control over simple sentence structures but little control over more complex structures
 - some passages that invite fluid oral reading and others, though functional, lack energy
 - repeated weaknesses in the conventions of Standard Written English and errors in grammar and usage that do not block meaning but do distract the reader

Met

The student:

Grammar and Usage:

- spells 62 92 words of the" Master List of Most Frequently Misspelled Words"
- identifies and uses verbs, nouns, pronouns, adjectives, adverbs, prepositions, and prepositional phrases most of the time
- identifies and uses conjunctions and interjections most of the time
- uses commas in direct address and joining two complete sentences with demonstrative pronouns (e.g., this, that, these, and those) most of the time
- identifies and uses modifiers most of the time
- identifies and uses irregular reflexive pronouns (e.g., *myself*, *yourself*, *himself*, *herself*, *and itself*) most of the time
- identifies and uses prepositional phrases as interrupters most of the time
- identifies and uses indefinite pronouns (e.g., everyone, anybody, someone, each) most of the time
- identifies and uses collective nouns (e.g., class, team, band) most of the time

- the learner writes friendly letters and short compositions characterized by:
 - clear and focused ideas and supporting details that are adequate and relevant although they may be overly general or limited in places
 - evidence of an organizational plan that is coherent and clear and helps the reader, despite some weaknesses or predictability
 - a sense of audience and a voice that is sometimes expressive, engaging or sincere
 - phrases and sentences that demonstrate relationships between the ideas expressed
 - words that are functional and appropriate to audience and purpose although there are only rare attempts to experiment with language
 - a natural sound and sentences that vary in structure, length, and beginnings
 - only occasional lapses in correct grammar and usage that are not severe enough to interfere significantly with the writer's main purpose or confuse the reader
 - the need for only moderate editing

Exceeds

The student:

Grammar and Usage:

- spells 93 120 words of the" Master List of Most Frequently Misspelled Words"
- identifies and uses present, past and future continuous verb tense (e.g., am watching, are doing, were doing, was sleeping, will be doing, will be studying)
- identifies and uses singular and plural reflexive pronouns (e.g., *myself*, *yourself*, *himself*, *herself*, *itself*, *ourselves*, *yourselves*, *and themselves*)
- uses commas in direct address, and joining two complete sentences with demonstrative pronouns (e.g., *this, that, these, and those*) consistently
- identifies and uses comparative and superlatives adverbs (e.g., *better and best or worse and worst*) consistently
- identifies and uses past participles and compound verbs most of the time
- uses parallel structure consistently
- identifies and uses modifiers consistently
- identifies and uses irregular reflexive pronouns (e.g., *myself, yourself, himself, herself, and itself*) consistently
- identifies and uses prepositional phrases as interrupters consistently
- identifies and uses indefinite pronouns (e.g., everyone, anybody, someone, each) consistently
- identifies and uses collective nouns (e.g., class, team, band) consistently

- writes friendly letters and short compositions characterized by:
 - clear, focused and interesting writing that holds the reader's attention
 - relevant and carefully selected details that provide, strong, accurate, credible support for major points
 - an organization that is clear and appropriate and enhances the central ideas and moves the reader through the text
 - smooth, effective transitions among all elements (sentences, paragraphs, and ideas)
 - a strong sense of audience and a voice that shows originality, liveliness, honesty, conviction, excitement, or humor as appropriate
 - vocabulary that is striking and varied, but natural, accurate and purposeful
 - writing that has an easy flow and rhythm and variation in sentence structure, length, and beginnings that add interest to the text
 - strong control of standard writing conventions with little need of editing

ASE I/GED

Beginning

The student:

Grammar and Usage:

- spells 121 150 words of the "Master List of Most Frequently Misspelled Words"
 List
- uses a thesaurus to look up synonyms and antonyms some of the time
- edits for usage and grammar some of the time

Writing Process:

- elects a topic and purpose for writing
- outlines appropriately
- prepares a preliminary draft
- writes persuasive, expository and narrative essays of at least 200 words in length, using a selected topic and with a specific purpose
- writes compositions/essays characterized by:
 - unclear or undeveloped ideas and insufficient details
 - marked lack of organization
 - little audience awareness
 - word choice that is repetitious or imprecise
 - a significant number of awkward, choppy, or rambling constructions
 - frequent, significant errors that impede readability

Approaching

The student:

Grammar and Usage:

- spells 151 180 words of the "Master List of Most Frequently Misspelled Words"
- uses a thesaurus to look up synonyms and antonyms most of the time
- edits for usage and grammar some of the time
- identifies and uses semi-colons some of the time
- avoids dangling modifiers some of the time

- elects a topic and purpose for writing
- brainstorms and organizes ideas
- outlines appropriately
- prepares a preliminary draft
- sequences information appropriately

- groups like ideas
- revises the preliminary draft to improve content and sequence
- writes compositions/essays characterized by:
 - some evidence of planning, although the development may be insufficient
 - an easily identifiable purpose and main ideas although they tend to be overly broad or simplistic
 - supporting detail that tends to be limited to a listing or a repetition of ideas
 - an organization and structure that is inconsistent or skeletal although some relationship among ideas is present and transitions sometimes work
 - an occasional sense of the writer behind the words; however, the voice tends to shift or lapse into the mechanical
 - language and word choice that is accurate but quite ordinary and lacking in precision and variety
 - good control over simple sentence structures, but little control over more complex structures
 - some passages that invite fluid oral reading and others, though functional, lack energy
 - repeated weaknesses in the conventions of Standard Written English and errors in grammar and usage that do not block meaning but do distract the reader

Met

The student:

Grammar and Usage:

- spells 181 210 words of the "Master List of Most Frequently Misspelled Words" List
- identifies and uses commas, semicolons and colons most of the time
- avoids problems in subject-verb agreement (compound subjects) most of the time
- avoids dangling modifiers most of the time
- applies standard grammar and usage to combine simple sentences into compound and complex sentences and to construct conditional clauses most of the time

- elects a topic and purpose for writing
- analyzes the writing situation (audience, topic and purpose)
- outlines appropriately
- prepares a preliminary draft
- sequences information clearly and appropriately, including time order, cause and effect, explaining a routine or how something works

- groups like ideas
- revises the preliminary draft to improve content, style, organization and sequence and correct punctuation, usage, spelling and sentence structure as indicated above
- writes compositions/essays characterized by:
 - clear and focused ideas and supporting details that are adequate and relevant although they may be overly general or limited in places
 - evidence of an organizational plan that is coherent and clear and helps the reader, despite some weaknesses or predictability
 - a sense of audience and a voice that is sometimes expressive, engaging or sincere
 - phrases and sentences that demonstrate relationships between the ideas expressed
 - words that are functional and appropriate to audience and purpose although there are only rare attempts to experiment with language
 - a natural sound and sentences that vary in structure, length and beginnings
 - only occasional lapses in correct grammar and usage that are not severe enough to interfere significantly with the writer's main purpose or confuse the reader
 - the need for only moderate editing

Exceeds

The student:

Grammar and Usage:

- spells 211 240 words of the "Master List of Most Frequently Misspelled Words"
- identifies and uses past participles and compound verbs
- identifies and uses parallel structure
- identifies and uses conjunctive adverbs to show contrast, a result, and explain (e.g., however, for example, furthermore, and therefore)

- elects a topic and purpose for writing
- analyzes the writing situation (*audience*, *topic* and *purpose*)
- outlines appropriately
- prepares a preliminary draft
- sequences information clearly and appropriately, including time order, cause and effect, explaining a routine or how something words
- groups like ideas
- revises the preliminary draft to improve content, style, organization and sequence and correct punctuation, usage, spelling and sentence structure as indicated above
- submits a clear and coherent final draft

- writes compositions/essays characterized by:
 - clear, focused and interesting writing that holds the reader's attention
 - relevant, and carefully selected details that provide, strong, accurate, credible support for major points
 - an organization that is clear and appropriate and enhances the central ideas and moves the reader through the text
 - smooth, effective transitions among all elements (sentences, paragraphs, and ideas)
 - a strong sense of audience and a voice that shows originality, liveliness, honesty, conviction, excitement, or humor as appropriate
 - vocabulary that is striking and varied, but natural and accurate and purposeful
 - writing that has an easy flow and rhythm and variation in sentence structure, length, and beginnings that add interest to the text
 - strong control of standard writing conventions with little need of editing

ASE II

Beginning

The student:

Grammar and Usage:

- spells 241 270 words of the "Master List of Most Frequently Misspelled Words" List
- edits for punctuation and spelling, capitalization, grammar, and usage rules some of the time

- writes research papers characterized by:
 - topic not addressed or researched properly
 - support for the main idea that is present but undeveloped and not consistently well chosen for audience and purpose
 - a marked lack of organization
 - format not utilized for ease of understanding
 - many sources that are not identified properly
 - word choice that is repetitious or imprecise
 - a significant number of awkward, choppy, or rambling constructions
 - frequent, significant errors that impede readability

- writes a resume characterized by:
 - essential information that is missing (address, phone number, education level)
 - work experience included tends to be irrelevant and disorganized
 - information that tends to be quite ordinary, lacking interest, precision, and/or variety
 - some errors in Standard English that interfere with getting the point across
- writes business letters characterized by:
 - improper format
 - marked lack of organization
 - jargon and unnecessary words
 - unclear purpose
 - incorrect tone not suited to the audience
 - unclear or undeveloped ideas and insufficient details
 - a significant number of awkward, choppy, or rambling constructions
 - errors in Standard English which interfere with the meaning of the letter

Approaching

The student:

Grammar and Usage:

- spells 271 300 words of the "Master List of Most Frequently Misspelled Words" List
- identifies and uses gerunds (nouns ending in "ing") some of the time
- identifies and uses conjunctive adverbs to show contrast, a result, and explain (e.g., however, for example, furthermore, and therefore) some of the time

- writes research papers characterized by:
 - topic properly identified yet only minimal research reflected
 - main ideas supported with some facts, details, examples and explanations that are relevant but limited and not well suited to the audience or purpose
 - an organization and structure that is inconsistent or skeletal although some relationship among ideas is present and transitions sometimes work
 - limited resources identified and cited properly
 - language and word choice that is accurate but quite ordinary and lacking in precision and variety
 - good control over simple sentence structures, but little control over more complex structures
 - some passages that invite fluid oral reading and others, though functional, lack energy
 - repeated weaknesses in the conventions of Standard Written English and errors in grammar and usage that do not block meaning but do distract the reader

- writes a resume characterized by:
 - work experience not properly sequenced
 - most of the necessary information included but in a manner that tends to be mechanical rather than fluid
 - no clear goal stated
 - improper or ineffective format
 - some errors in Standard English which stand out but don't interfere with getting the point across
- writes business letters characterized by:
 - adequate format
 - organization and structure that is inconsistent or skeletal although some relationship among ideas is present and transitions sometimes work
 - language and word choice that is accurate but some cliches and jargon still apparent
 - an easily identifiable purpose and main ideas although they tend to be overly broad or simplistic and message remains unclear
 - supporting detail which tends to be limited to a listing or a repetition of ideas
 - an occasional sense of the writer behind the words but the voice tends to shift or lapse into the mechanical
 - good control over simple sentence structures, but little control over more complex structures
 - some passages that invite fluid oral reading and others, though functional, lack energy
 - some errors in Standard English that do not block meaning but do distract the reader

Met

The student:

Grammar and Usage:

- spells 301 330 words of the "Master List of Most Frequently Misspelled Words" List
- identifies and uses gerunds (nouns ending in "ing") most of the time
- identifies and uses conjunctive adverbs to show contrast, a result, and explain (however, for example, furthermore, and therefore) most of the time
- applies standard grammar and usage to combine simple sentences into compound and complex sentences, to construct conditional clauses, modifiers and parallel structure most of the time
- edits for organization as well as punctuation and spelling, capitalization, grammar, and usage rules most of the time
- uses a thesaurus to develop clustering most of the time

- writes research papers characterized by:
 - a coherent thesis accompanied by clear and accurate perspectives on the subject
 - main ideas supported with facts, details, examples, and explanations from multiple authoritative sources
 - an organizational plan that is coherent and clear and helps the reader, despite some weaknesses or predictability
 - a sense of audience and a voice that is sometimes expressive, engaging or sincere
 - some visual information (charts, maps, graphs) to enhance the report
 - proper and effective format that reinforces coherence within and across paragraphs
 - reference sources with footnotes and a bibliography
 - only occasional lapses in correct grammar and usage that are not severe enough to interfere significantly with the writer's main purpose or confuse the reader
- writes a resume characterized by:
 - proper format that addresses audience needs and stated purpose
 - work experience that is relevant and properly sequenced
 - essential information that is complete
 - accurate, specific words that effectively convey the intended message
 - minor errors in Standard English
- writes business letters characterized by:
 - format that is appropriate to audience and purpose
 - organizational plan that is coherent and clear and helps the reader, despite some weaknesses or predictability
 - ideas presented simply and in clear, logical order
 - adequate and relevant supporting details
 - appropriate tone
 - voice that is sometimes expressive, engaging or sincere
 - phrases and sentences that demonstrate relationships between the ideas expressed
 - words that are functional and appropriate to audience and purpose although there are only rare attempts to experiment with language
 - a natural sound and sentences that vary in structure, length, and beginnings
 - minimal errors in Standard English in correct grammar and usage, but none severe enough to interfere significantly with the writer's main purpose or confuse the reader

Exceeds

The student:

Grammar and Usage:

- spells 331 360 words of the "Master List of Most Frequently Misspelled Words" List
- edits for organization, style, sequence, and parallel structure

- writes research papers characterized by:
 - relevant and tightly drawn questions about the topic
 - clear and accurate perspectives on the subject
 - persuasive writing with an abundance of authoritative sources (speakers, periodicals, online searches) to support the main ideas
 - an organization that is clear and appropriate and enhances the central ideas and moves the reader through the text
 - excellent format that presents a literal and inferential understanding of the topic in a manner that balances most aspects of the writing and makes effective transitions between sentences and ideas to unify key ideas
 - reference sources with footnotes and a bibliography
 - a strong sense of audience and a voice that shows originality, liveliness, honesty, conviction, excitement, or humor as appropriate
 - vocabulary that is striking and varied, but natural and accurate and purposeful
 - writing that has an easy flow and rhythm and variation in sentence structure, length, and beginnings that add interest to the text
 - strong control of standard writing conventions with little need of editing
- writes a resume characterized by:
 - proper and effective format
 - a stated purpose that offers substantive ideas and effective support for each of the points
 - accurate, specific words that energize the writing and effectively convey the intended message
 - clear details of work experience provided in a manner that addresses audience needs, stated purpose and context
 - proper use of Standard English
- writes business letters characterized by:
 - format appropriate to audience and purpose
 - clear, focused and interesting writing that holds the reader's attention
 - relevant and carefully selected details that provide, strong, accurate, credible support for major points
 - an organization that is clear and appropriate and enhances the central ideas and moves the reader through the text

- smooth, effective transitions among all elements (sentences, paragraphs, and ideas)
- a strong sense of audience and a voice that shows originality, liveliness, honesty, conviction, excitement, or humor as appropriate
- vocabulary that is striking and varied, but natural and accurate and purposeful
- professionally written, natural tone of voice that is free of jargon and cliches
- writing that has an easy flow and rhythm, variation in sentence structure and length, and beginnings that add interest to the text
- few or no errors in Standard English demonstrating strong control of standard writing conventions with little need of editing

Writing Sample Activities*

Standard: The adult learner uses written language to communicate in a variety of situations.

Indicator A: Applies correct spelling, punctuation, capitalization, grammar and usage rules to complete a variety of writing tasks

	Family	Workplace	Community
Pre-Literacy	Students copy new words relating to the family.	Students copy new words relating to work.	Students copy new words relating to the community.
	Students work with a partner to copy words and correct penmanship.	Students work with a partner to copy words and correct penmanship.	Students work with a partner to copy words and correct penmanship.
	Students copy/trace a message from a printed source to share with a family member.	Students copy/trace a message from a printed source to share with a co-worker.	Students copy/trace a message from a printed source.
	Students use new words in simple written messages to family members.	Students spell basic sight words that apply to the workplace.	Students identify basic sight words from the local newspaper.
		Students copy complete simple sentences including capitalization, end punctuation, subject and predicate.	
		Students use pronouns to replace proper names in simple messages.	

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ABE I	Students describe last weekend's activities using compound sentences. Students practice spelling with family members, use family members titles (e.g., father, mother, niece, aunt, sister). Students use possessives to declare ownership of items. Students write a paragraph about a family incident using pronouns and adjectives and correct ending punctuation.	Students make a list of occupations using a dictionary or other resources. Students locate and use vocabulary found in a job application. Students take spelling quizzes, written and oral.	Students write checks to pay bills; write exclamatory sentences; list 10 terms specific to sporting events. Students write questions to ask a sales person before making a major purchase. Students rewrite a given paragraph checking for punctuation, spelling, grammar and subject/verb agreement. Students use abbreviations correctly for states, months, and days. Students write and spell places of business within a community (e.g., post office, hospital, supermarket) using a dictionary or other resources. Students look up and spell words with silent letters.
ABE II	Students develop a schedule and routine to practice using the words in sentences and stories. After a family get-together, students write a dialogue of 10 sentences based on a conversation heard at the event. Check spelling with dictionary and use adjectives and adverbs to add color and precision to the writing Students write a friendly letter to a person who deals with the family (e.g., doctor, dentist, clerk, teacher), using commas, periods, and other appropriate punctuation. Students play Scrabble to improve spelling skills.	Students compose a list of words used on the job that students do not know how to spell. Students look up misspelled words on reports used at work. Classify types of errors, formulate rules and determine correct spelling. Students demonstrate in a piece of writing the ability to manage the conventions, grammar, and usage of English so they aid rather than interfere with reading using different verb tenses.	Students look up misspelled words used in community written reports (e.g., Block Watch Reports, letters to friends, and/or businesses). Classify types of errors, formulate rules and determine correct spelling. Students attend a civic meeting (e.g., city council, school board). Write a dialogue of 10 sentences regarding what was said at the meeting; avoid sentence fragments and runon sentences.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ABE III	Students write a letter to a relative who lives far away. Suggest ten differences in the living conditions. Apply rules of capitalization, and basic punctuation. Ask the relative to respond. Students discuss with a family member how a special holiday has been celebrated by the family. Write a dialogue of 10 sentences in quotation dialogue form. Then identify the basic parts of speech.	Students write a dialogue of 10 sentences based on a conversation between a supervisor and a worker. Identify the various parts of speech in each sentence. Students interview a co-worker about a job-related topic. Record the conversation if possible. Write the conversation in dialogue form, checking for correct spelling and punctuation. After writing the above conversation, students write a friendly letter to the co-worker telling him/her what was learned and thank him/her for participating. Proof read and edit for punctuation, grammar, sentence construction, spelling, and usage.	Students look up misspelled words used in community written reports (e.g., Block Watch Reports, letters to friends, and/or businesses). Classify types of errors, formulate rules and determine correct spelling. Students attend a civic meeting (e.g., city council, school board). Write a dialogue of 10 sentences regarding what was said at the meeting. Use modifiers when appropriate.
ASE I/GED	As a group, students increase vocabulary using a thesaurus to replace words in a magazine article. Students do crossword puzzles to discover new words. Students write a review of a book, article or movie with compound and complex sentences. Students describe the rewards and consequences for specific behaviors. Use conditional verb tenses.	Students use a thesaurus in writing a cover letter to a perspective employer. Students write a positive evaluation of a fellow employee or student. Edit for proper punctuation and capitalization, including comas, colons, and semicolons. Students edit a workplace document and correct problems with subject-verb agreement, dangling modifiers, punctuation and capitalization errors.	Students write an announcement for a community event. Edit for proper punctuation and capitalization. Students write a formal letter requesting the use of a public meeting hall using proper punctuation grammar, and capitalization. Students critique the writing of a peer in light of the purposes, audiences, and contexts that apply to the work. Students incorporate into revised drafts, as appropriate, suggestions taken from critiques made by peers and teachers. Students read an article in the newspaper. Identify the parts of speech. Summarize the article.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ASE II

Students write a consumer complaint or praise letter observing the conventions of language.

Students describe parent/child interaction and its effect on child development demonstrating control of paragraph and sentence construction, grammar, and usage.

Students write a family history. Be sure to include use of parallel structure, modifiers, compound verbs with past participles, and common homonyms. Identify the parts of speech. Proofread story with a peer or instructor.

Students use a thesaurus in writing a cover letter to a perspective employer.

Students write a positive evaluation of a fellow employee or student. Edit for proper punctuation and capitalization.

Students proofread a workplace document, using dictionaries, thesauruses, and other resources as appropriate.

Students write about the pros and cons of a certain job. Be sure to include use of parallel structure, modifiers, compound verbs with past participles, and common homonyms. Identify the parts of speech. Proofread story with a peer or instructor.

With a team of two peers, students read a newspaper article in the business section. Identify as many parts of speech as they can. Write a summary of the article.

Students write an editorial to the newspaper concerning a community problem or respond to an existing editorial demonstrating the use of a variety of sentence patterns for stylistic effect.

Students write a formal written proposal to an organization beyond the school and edit for proper formal and standard grammar and usage.

Students describe the reasons for stylistic choices made as a writer.

Students interview someone who works for a government or community agency. Ask what they do for the community. Write a summary of the interview. Be sure to include use of parallel structure, modifiers, compound verbs with past participles, and common homonyms. Proofread story with a peer or instructor.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Writing Sample Activities*

Indicator B: Applies the writing process to complete a variety of writing tasks

	Family	Workplace	Community
Pre-Literacy	Students make a list of family members and construct a family tree.	Students complete simple forms or applications with name, address, phone, birth date and social security number.	Students apply for a library card.
ABE I	Students write a note to their child's teacher. Students write a paragraph describing a neighborhood. Students write directions for the route from home to school, work, the store, or the church. Draw a map to complete the explanation. Students write a set of directions from home to school.	Students paraphrase a paragraph from an employee manual. Students write questions to be asked at a job interview. Write answers to these questions. Students make a chart to track their attendance at work or school. Students write a set of directions from their home to the workplace	As a class project, students choose a current event topic. Brainstorm ideas, facts, and opinions about the topic. Construct a basic outline and write several sentences pertaining to the topic. After writing several dictated sentences on a topic, students put them in order.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ABE II	Students write one paragraph essay describing how their families celebrate holidays. Students share the essay written above with a peer. Discuss the similarities and differences of opinions and experiences. Students write a friendly letter to a relative updating them on the health and activities of each member of the family. As a class, students conduct a research project comparing and evaluating the relative costs, benefits, and problems of using different forms of transportation to get to a vacation destination. Chart and graph the options. Students write a comparison of a classic book with a televised version of the same work.	Students write a paragraph essay about the ideal job (i.e., type of work, job environment, benefits, supervision) Students share the expository essay written above with a peer. Discuss the similarities and differences of opinions. Students write a business letter to a future employer describing why they should be hired. Include a simple resume and a job application. Students conduct a research project on what skills and training are needed for a certain job.	Students write a dialogue with a government or non-profit agency that outlines the details of a problem and suggests possible solutions. Students conduct a research project through a variety of means (e.g. interviews, observation, as well as traditional library research); write their findings and revise their draft for spelling, punctuation, capitalization, sentence fragments, run-on sentences, and grammar and usage mistakes. Students write a movie review. Students create a detailed travel diary and ask for feedback from their peers on its clarity, thoroughness, and interest level.
ABE III	Students write a three-paragraph expository essay comparing how they were raised with how they will raise their children. Students share the expository essay written above with a peer. Discuss the similarities and differences of opinions and experiences. Students write a friendly letter to a relative updating them on the health and activities of each member of the family. As a class, students conduct a research project comparing and evaluating the relative costs, benefits, and problems of several vacation options.	Students write a three-paragraph expository essay about the qualities of a good supervisor. Students share the expository essay written above with a peer. Discuss the similarities and differences of opinions. Students write a business letter to a future employer describing why they should be hired. Students conduct a research project on what skills and training are needed for a certain job.	Students write a three-paragraph narrative about how the neighborhood, city, and/or state have changed over the past five years. Students share the community history personal narrative with a peer. Ask a partner five questions about his/her story that clarify points made or ask for more information. Students write a letter to a government or agency official outlining the details of a problem and suggesting possible solutions. Students conduct a research project concerning strengths and needed improvements in the community (e.g., schools, businesses, recreational activities, churches).

ASE I/GED	Students write an expository essay on	Students write an expository essay on	Students write expository essay on voting,
TIOL I/ GLD	cultural traditions (e.g., holidays, funerals,	conflict resolution, unions, or work	gambling, or the best place to live.
	weddings). Contrast the life of an only child	conditions.	
	or with one from a large family; contrast		Students compose a narrative describing
	modern methods and grandparents traditions.	Students compose a narrative describing a	politicians, experience with community
		job interview, an on the job experience,	services, or why there are zoning laws.
	Students compose a narrative describing	or a most admired person	
	their best day, their family hero, or their		Students write a narrative poem or song
	dream home and location.	Students develop a set of instructions for	based on a modern hero.
		organizing a class meeting.	
	Students write a paper about a common		Students participates in the establishment
	childhood experience from a more adult	Students develop and maintain work	and operation of self-directed work teams
	perspective.	schedules that reflect consideration of	that define the roles and shares
		priorities and deadlines, manage time and	responsibilities among team members, set
		progress toward meeting deadlines.	objectives and time frames for the work to be
			completed, establish processes for group
			decision making.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

ASE II	Students conduct research on learning styles,	Students conduct research on	Students conduct research on voting trends,
11011	birth control, or quality of life.	management styles, labor relations, or	biography of a famous person, or the local
		inventions.	economy.
	Students evaluate the pros and cons of a loan application.	Students write a cover letter.	Students write a letter to the editor.
	Students evaluate the pros and cons of a contract.	Students list education, job/career skills and experiences, and develop a resume.	Students write a consumer complaint letter.
			Students examine campaign literature and
	Students write a paper explaining how some	Students write an incident report or letter	make a list of suggestions for political
	experiences, conditions, or concerns have	of commendation for a co-worker. Edit	leaders.
	universal significance.	for proper punctuation and capitalization.	
			Students research and critique a public
	Students compare a scene from a work of	Students gather information to complete	policy using reasoned arguments to support
	fiction with a lesson learned from a personal	project work, including identifying potential sources of information, using	an opinion.
	experience.	appropriate techniques to collect the	Students write a reflective essay that
		information. Students interpret and	compares a school issue to broader societal
		evaluate the information in terms of	concerns.
		completeness, relevance, and validity,	
		and show evidence of research in the	Students prepare formal written
		completed project.	correspondence with an organization beyond
			the school that writes in a style appropriate to
			the purpose and audience of the
			correspondence.

^{*}Sample activities incorporate the core competencies of communication, interpersonal and critical-thinking skills.

Master List of Frequently Misspelled Words

All misspelled words on the GED Test will be taken from the following master list. Other forms of most of these words including plurals and forms requiring suffixes may also be tested.

A	agree	arrangement	borrow	chose
a lot	aisle	article	bottle	cigarette
ability	all right	artificial	bottom	circumstance
absence	almost	ascend	boundary	citizen
absent	already	assistance	brake	clothes
abundance	although	assistant	breadth	clothing
accept	altogether	associate	breath	coarse
acceptable	always	association	breathe	coffee
accident	amateur	attempt	brilliant	collect
accommodate	American	attendance	building	college
accompanied	among	attention	bulletin	column
accomplish	amount	audience	bureau	comedy
accumulation	analysis	August	burial	comfortable
accuse	analyze	author	buried	commitment
accustomed	angel	automobile	bury	committed
ache	angle	autumn	bushes	committee
achieve	annual	auxiliary	business	communicate
achievement	another	available		company
acknowledge	answer	avenue	C	comparative
acquaintance	antiseptic	awful	cafeteria	compel
acquainted	anxious	awkward	calculator	competent
acquire	apologize		calendar	competition
across	apparatus	В	campaign	compliment
address	apparent	bachelor	capital	conceal
addressed	appear	balance	capitol	conceit
adequate	appearance	balloon	captain	conceivable
advantage	appetite	bargain	career	conceive
advantageous	application	basic	careful	concentration
advertise	apply	beautiful	careless	conception
advertisement	appreciate	because	carriage	condition
advice	appreciation	become	carrying	conference
advisable	approach	before	category	confident
advise	appropriate	beginning	ceiling	congratulate
advisor	approval	being	cemetery	conquer
aerial	approve	believe	cereal	conscience
affect	approximate	benefit	certain	conscientious
affectionate	argue	benefited	changeable	conscious
again	arguing	between	characteristic	consequence
against	argument	bicycle	charity	consequently
aggravate	arouse	board	chief	considerable
aggressive	arrange	bored	choose	consistency

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consistent	despair	eligibility	fascinate	height
continual	desperate	eligible	fascinating	heroes
continuous	dessert	eliminate	fatigue	heroine
controlled	destruction	embarrass	February	hideous
controversy	determine	embarrassment	financial	himself
convenience	develop	emergency	financier	hoarse
convenient	development	emphasis	flourish	holiday
conversation	device	emphasize	forcibly	hopeless
corporal	dictator	enclosure	forehead	hospital
corroborate	died	encouraging	foreign	humorous
council	difference	endeavor	formal	hurried
counsel	different	engineer	former	hurrying
counselor	dilemma	English	fortunate	
courage	dinner	enormous	fourteen	I
courageous	direction	enough	fourth	ignorance
course	disappear	entrance	frequent	imaginary
courteous	disappear	envelope	friend	imbecile
	• •	-		
courtesy	disappointment	environment	frightening	imitation
criticism	disapproval	equipment	fundamental	immediately
criticize	disapprove	equipped	further	immigrant
crystal	disastrous	especially		incidental
curiosity	discipline	essential	G	increase
cylinder	discover	evening	gallon	independence
	discriminate	evident	garden	independent
D	disease	exaggerate	gardener	indispensable
daily	dissatisfied	exaggeration	general	inevitable
daughter	dissection	examine	genius	influence
daybreak	dissipate	exceed	government	influential
death	distance	excellent	governor	initiate
deceive	distinction	except	grammar	innocence
December	division	exceptional	grateful	inoculate
deception	doctor	exercise	great	inquiry
decide	dollar	exhausted	grievance	insistent
decision	doubt	exhaustion	grievous	instead
decisive	dozen	exhilaration	grocery	instinct
deed	470 - 4 -5	existence	guarantee	integrity
definite	E	exorbitant	guess	intellectual
delicious	earnest	expense	guidance	intelligence
dependent	easy	experience	Surdance	intercede
deposit	ecstasy	experiment	\mathbf{H}	interest
derelict	ecstatic	explanation	half	interest
descend	education	-		interference
		extreme	hammer	
descent	effect	П	handkerchief	interpreted
describe	efficiency	F	happiness	interrupt
description	efficient	facility	healthy	invitation
desert	eight	factory	heard	irrelevant
desirable	either	familiar	heavy	irresistible

irritable	magazine	obedient	perhaps	preparation
island	maintenance	obstacle	period	prepare
its	maneuver	occasion	permanence	prescription
it's	marriage	occasional	permanent	presence
itself	married	occur	perpendicular	president
165011	marry	occurred	perseverance	prevalent
J	match	occurrence	persevere	primitive
January	material	ocean	persistent	principal
jealous	mathematics	offer	persuade	principle
journal	measure	often	personality	privilege
judgment	medicine	omission	personal	probably
<i>J E</i>	million	omit	personnel	procedure
K	miniature	once	persuade	proceed
kindergarten	minimum	operate	persuasion	produce
kitchen	miracle	opinion	pertain	professional
knew	miscellaneous	opportune	picture	professor
knock	mischief	opportunity	piece	profitable
know	mischievous	optimist	plain	prominent
knowledge	misspelled	optimistic	playwright	promise
	mistake	origin	pleasant	pronounce
L	momentous	original	please	pronunciation
labor	monkey	oscillate	pleasure	propeller
laboratory	monotonous	ought	pocket	prophecy
laid	moral	ounce	poison	prophet
language	morale	overcoat	policeman	prospect
later	mortgage		political	psychology
latter	mountain	P	population	pursue
laugh	mournful	paid	portrayal	pursuit
leisure	muscle	pamphlet	positive	
length	mysterious	panicky	possess	Q
lesson	mystery	parallel	possession	quality
library		parallelism	possessive	quantity
license	N	particular	possible	quarreling
light	narrative	partner	post office	quart
likelihood	natural	pastime	potatoes	quarter
likely	necessary	patience	practical	quiet
literal literature	needle	peace	prairie	quite
livelihood	negligence	peaceable	precede preceding	R
loaf	neighbor neither	pear peculiar	precise	raise
loneliness		pencil	predictable	realistic
loose	newspaper newsstand	people	prefer	realize
lose	niece	perceive	preference	reason
losing	noticeable	perception	preferential	rebellion
loyal	nonocaore	perfect	preferred	recede
loyalty	0	perform	prejudice	receipt
M	o'clock	performance	Projudice	receive
17.	JUIOUK	Portornance		1000110

recipe	service
recognize	several
recommend	severely
recuperate	shepherd
referred	sheriff
rehearsal	shining
reign	shoulder
relevant	shriek
relieve	siege
remedy	sight
renovate	signal
repeat	significan
repetition	significan
representative	similar
requirements	similarity
resemblance	sincerely
resistance	site
resource	soldier
respectability	solemn
responsibility	sophomor
restaurant	soul
rhythm	Source
rhythmical	souvenir
ridiculous	special
right	specified
role	specimen
roll	speech
roommate	stationary
	stationery
S	statue
sandwich	stockings
Saturday	stomach
scarcely	straight
scene	strength
schedule	strenuous
science	stretch

scientific

scissors

season

seize

sense

secretary

seminar

separate

sheriff shining shoulder shriek siege sight signal significance significant similar similarity sincerely site soldier solemn sophomore soul Source souvenir special specified specimen speech stationary stationery statue stockings stomach straight strength strenuous stretch striking studying substantial

succeed

sudden

suppress

successful

superintendent

surely surprise suspense sweat sweet syllable symmetrical sympathy synonym \mathbf{T} technical telegram telephone temperament temperature

tenant tendency tenement therefore thorough through title together tomorrow tongue toward tragedy transferred treasury tremendous tries truly twelfth twelve tyranny

U undoubtedly **United States** university unnecessary unusual useful

usual

 \mathbf{V} vacuum valley valuable variety vegetable vein vengeance versatile vicinity vicious view village villain visitor voice volume

W waist weak wear weather Wednesday week weigh weird whether which while whole wholly whose wretched